

तमसो मा ज्योतिर्गमय

SANTINIKETAN
VISWA BHARATI
LIBRARY

614.942

Sm 55

RACE REGENERATION



THE AUTHOR.

RACE REGENERATION

By

E. J. SMITH

Author of "Maternity and Child Welfare," and "A Yorkshireman Abroad"
*Member of the National Birth Rate Commission; Chairman of
the Health Committee of the Bradford Corporation; Chairman
of the Bradford Insurance Committee; Member of the
Council of the National Clean Milk Society;
Member of the Institute of Hygiene;
Member of the Society for the
Study of Inebriety*

LONDON

P. S. KING & SON, LTD.
ORCHARD HOUSE, WESTMINSTER

1918

To

HER WHO HAS BEEN TO ME A FAITHFUL WIFE,

TO OUR CHILDREN A DEVOTED MOTHER,

AND TO THOSE IN NEED

A CONSTANT FRIEND,

THIS BOOK IS AFFECTIONATELY DEDICATED

LIST OF ILLUSTRATIONS

	FACING PAGE
1. The Author (<i>Frontispiece</i>)	
BIERLEY HALL SANATORIUM (66 BEDS).	
2. The Approach	1
3. The Hall	5
4. A Shelter and Avenue	7
5. A Pavilion	10
6. Lakes and Druidical Remains	12
7. In the Grounds: Off Duty	16
8. The Young Doctor at Work	19
9. Proposed Extension for Surgical Cases (80 beds)	21
BIERLEY HALL POULTRY FARM.	
10. General View	23
11. Incubator and Food Houses.	26
12. Incubator Room	28
13. Food Store	30
14. Foster Mothers	33
15. Cool Brooders	37
ODSAL SANATORIUM (84 BEDS).	
16. Wards and Administrative Block	39
17. Back View of Administrative Block	42
18. Piggeries	44
19. „ (Interior)	48
THE SEMON CONVALESCENTS' HOME.	
20. A Sheltered Spot with Home in the background	51
21. The Retreat	53
22. The Bowling Green	55
23. A Quiet Corner	58
GRASSINGTON SANATORIUM (152 BEDS).	
24. Grassington Sanatorium for Early Cases (in course of construction)	60

HOUSING.

25. Sermons in Stones	62
26. " Where Wealth accumulates and Men decay "	65
27. The Playing-fields of England	69
28. The Bulwarks of the State	71
29. Of such is the Kingdom of Heaven	74
30. Where the Churches overlap	76
31. Home Comfort in excelsis	80
32. Where the Imperial Race is reared	83
33. Watchman, what of the Night ?	85

MATERNITY AND CHILD WELFARE INSTITUTIONS

MATERNITY HOME.

34. Waiting Room : Ante-natal Clinic	87
35. Consulting Room : " "	90
36. Labour Room for Normal Cases	92
37. Operating Theatre	94
38. Corner of a Ward	97
39. Open-air Treatment	101

MATERNITY NURSES' HOME.

40. Dining Room	103
41. Sitting Room	106
42. Bedroom	108

INFANTS' DEPARTMENT.

43. Elevation of Building	112
44. Waiting Room	115
45. Undressing Room	117
46. Weighing and Measuring	119
47. Medical Consultation	122
48. Treatment Room.	124
49. Milk Laboratory (No. 1)	126
50. " " (No. 2)	129
51. Dispensary	133

INFANTS' HOSPITAL.

52. Ward	135
53. Bathroom	138
54. Open-air Balcony	140

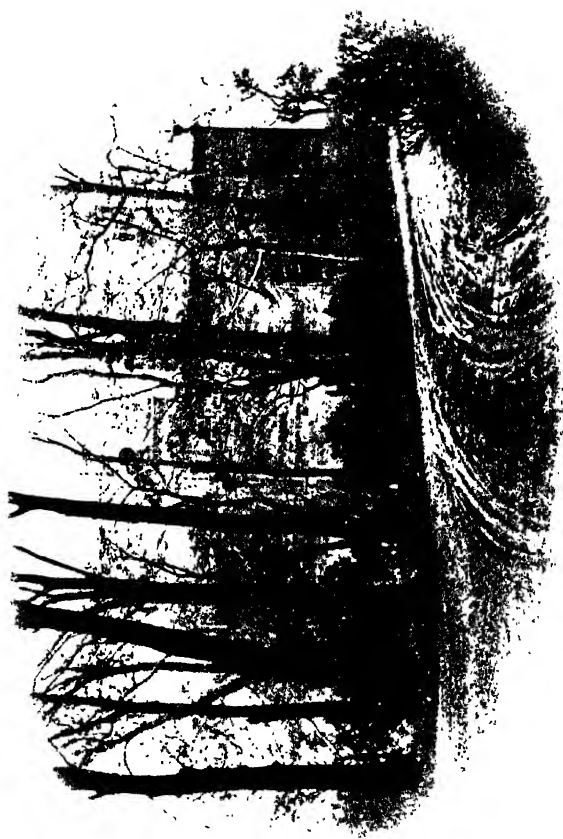
LIST OF ILLUSTRATIONS

xi

	FACING PAGE
55. The Raw Material	144
56. " " " "	147
57. The Finished Article	147
THE MILK DEPOT.	
58. Cleaning and Cooling	149
59. Testing Laboratory	151
60. Refrigerating Plant	154
61. Sterilizing Churns and Bottle Washing	156
62. Butter Making	158
63. Cheese Making	161
64. Dairy	165
65. Rear of Building	167
CHILDREN'S CLINIC	
66. Medical Consultation	170
67. Treatment Room	172
68. Eye Consulting Room	176
69. Infants' and Pre-school Clinics Creche	179
CHILDREN'S SPECIAL HOSPITAL	
70. Waiting Room	181
71. Medical Consultation	183
72. Operating Theatre	186
73. Ophthalmia Ward	188
DENTAL CLINIC.	
74. Corner of a Dental Clinic	190
FEELING EXPECTANT AND NURSING MOTHERS.	
75. Maternity Cooking Kitchen	193
76. " " " "	195
77. The Annexe	197
78. Feeding Centre	199
79. Cooking Demonstration	202
80. Health Visitors	204
MUNICIPAL LABORATORY.	
81. Municipal Bacteriological Laboratory	206
82. " " " " Incubator Room	208

COMMUNAL MEALS.

83. Communal Cooking Kitchen : Small Electrical Plant	211
84. Distributing Centre (1)	212
85. ,, ,, (2)	214



BIERLEY HALL SANATORIUM. THE APPROACH

CHAPTER I

OUR DUTY TO OUR SOLDIERS

IN these days when men are tempted to look at the war from every point of view except that which compelled us to enter it, one may be forgiven for trying to put first things first.

Belgium, which had neither lot nor part in the quarrel and was generally supposed to be protected by treaties signed by the disputants was over-run and its territory occupied; the immoral doctrine that "necessity knows no law" was deliberately adopted by a so-called civilized Power: premeditated and diabolical "frightfulness" was ruthlessly pursued as a recognized canon of warfare, and everything which peace-loving citizens hold sacred and dear was thrown into the melting-pot.

The question now being decided is whether the world shall be governed by its people for its people or by its kings for its kings; and if that issue is lost sight of among minor considerations democracy will not only be permanently enslaved, but we shall be thrown back into a world dominated by all the hellish forces upon which Germany is still relying for victory.

In these circumstances, we cannot be too often or too forcibly reminded that the extent to which the people allow their attention to be diverted from this great issue is the measure of their becoming, all unconsciously, the tools, as well as the victims of a materialistic civilization.

It was to deliver the world and its future from such a catastrophe that our soldiers went out to fight and to die. These faithful sons of Empire believed there were things even more important than life itself, and that one of them was to defend those sacred causes which make men and nations truly great and free.

They saw the scientific tyranny of callous and brutal militarism, exalted and worshipped as a deity, threatening the coming of that long-looked-for day of deliverance of the peoples towards which all high-minded action tends. The very fact that they abhorred the taking of life left them no choice but to stand between the victims and their oppressors. Just as gladly would they have displayed the same unselfish disregard of danger in protecting the life they were now compelled to take.

Said one of these heroes to a lady who had been asking why a common habit had not already been acquired, "I wouldn't like to do anything that would disappoint my father." Not long after—in the great advance of July 1, 1916—that noble officer led his men "over the top" with the magnetism and inspiration of a fearless soldier, a trusted leader and a worthy friend. He has

not been heard of since; but a letter written immediately before the terrible ordeal leaves no room for doubt that in this solemn hour of indescribable experiences, he—like so many others—touched the zenith of life. Allied to duty and to God, he risked his all for honour and freedom and future, for his native land, his home and his loved ones: above all for that mighty throng of innocent and helpless children whose little feet have still to come along the world's highway, and who *must* inherit what it is our privilege and responsibility to help to fashion.

What a glorious achievement it would be if the nation could celebrate that great day, "when the boys come home," by welcoming them to a land which in their absence had opened the way to a nobler conception of life and its duties.

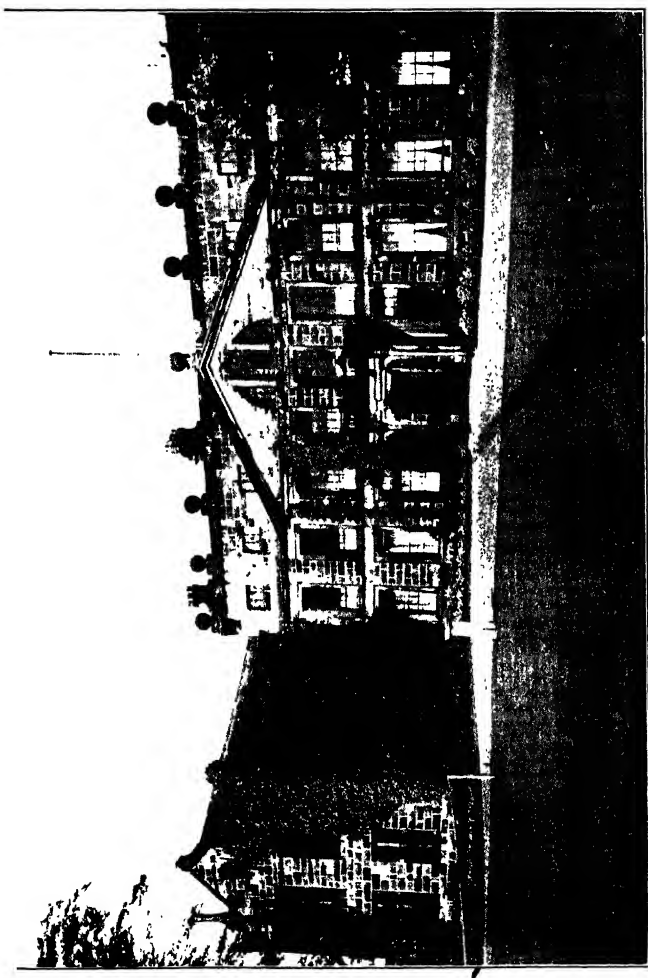
Undoubtedly the first step would be to transform the colossal power of wealth from an appalling menace to a redeeming agent, and its use from selfishness that is threatening the race to service which alone can save it.

The nation's wealth has been used to dominate in turn international relationships, the nation's civil life, its industries, its politics and its Press; it has become an almost insurmountable barrier to democratic emancipation, philanthropic enterprise, and religious work. It rests like a dead hand on the finest aspirations of men, and though the nation's abstract faith is Christian, its concrete practice is on Mammon.

One of the few compensating advantages of

the titanic struggle now being waged is the unceremonious manner in which it has compelled us to throw precedent to the four winds, and, by adopting remedies as drastic as the diseases they were intended to cure, enabled us to achieve what in times of peace was regarded as impossible. The Government has regulated finance, taken over the railways, limited profits, commandeered investments, bought food, reduced the hours of sale on licensed premises and made many other equally suggestive departures from the beaten track which demonstrate its ability—present and prospective—to deliver the people from their greatest enemy. At the same time and under exactly the same circumstances, wealth has been proving its indifference to public well-being, for where it has been permitted to go untrammelled, it has battered on the nation's necessities, while our heroes in the trenches have been forfeiting prospects and life for a pittance. Those whose cold, callous, and calculating propensities have extracted most plunder, and who hope the war will continue in order to swell their blood money, have added insult to injury through seeking to divert attention from the fact by becoming the pioneers of rigid economy in public expenditure to the detriment of both health and education, on the specious plea of financial necessity, as though, forsooth, weaker bodies and duller minds could compensate the State for their ill-gotten gains.

The future internal peace and prosperity of



BIERLEY HALL, SANATORIUM THE HALL.

the country demand that wealth should be subjugated to welfare, which alone can justify its existence; the country must hereafter belong to every man, woman and child in it, in a totally different sense from that understood when the duties of war were delegated to a standing Army and Navy. Where all have fought, all are entitled to share the victory. In the future, the State and the people must bear a new relationship to one another, a relationship which shall result in a great uplift of the masses.

The nation has been torn asunder and its people are prepared for drastic changes. It is for earnest men and women to determine now the character and fashioning of the reconstruction that must follow the war. Mighty forces are anticipating and preparing for the future with glib speeches about "war after war" which shall still further increase their opulence and extend their command over men. But we have not come into the world for the specific purpose of capturing its markets and working in order to make a few abnormally rich and the rest correspondingly poor. War is hell, and life is too precious to be for ever thrown into the insatiable jaws of perpetual international hatred and strife; the world is one, and the sooner we break down the dividing barriers and extend the uniting boundaries of goodwill, the sooner shall we be justified in our condemnation of Prussianism.

We stand therefore in the presence of a stock-taking of unparalleled importance, a review of the

past that is to indicate the line of advance into the future—for we must be careful to remember that motion is not necessarily progress; it may be retrogression.

If a new Britain is to rise out of the ashes of war, our industries must be measured not alone by the profits they create, but by a constantly rising standard of life for those engaged in them. To provide adequate wages and regular incomes does not spell ruin, but that wider circulation and increased spending power by means of which industries prosper and wealth grows.

The Open Sesame to our future well-being is the physical, mental and moral advancement to our people, and unless that becomes our supreme concern all the protection in the world cannot save us. A more equitable distribution of riches would not only promote commercial prosperity, but make possible the uplift and development of the common people, whom Lincoln said: "God must have loved, He made so many of them."

When we look upon Nature and the gracious inheritance bequeathed by God to man, there is surely something wrong with the uses to which this heritage has been put! One is drawn to the conclusion that the multiplication of fortunes in the hands of a few, the tyranny of vested interests, the incredible and unscrupulous power of money to dominate, direct and control men, to set up and pull down without appearing to act at all, nay, even to convert democracy itself



BIERLEY HALL SANATORIUM. A SHELTER AND AVENUE.

into an instrument for its own uses, is the fundamental cause of our national perils; and that, horrible as is the war abroad, it may be but the beginning of an even more momentous life-and-death struggle at home.

We must cease to try merely to lop off branches of evils, and apply ourselves to the higher and more imperative duty of digging away at their roots. In the meantime, we are engaged in the Sisyphus-like occupation of rolling the stone up the mountainous slopes of monopolies and vested interests, while wealth is taking its ceaseless toll of life by hurling it down again.

Our soldiers and sailors are hourly facing death in the trenches and on the seas to protect your liberties and mine. That is the supreme sacrifice. What are we doing to reward their valour? "The absence of high aim, not low achievement, is our sin." The memory of those honoured men who have so cheerfully given themselves, has brought us under a mighty obligation to lay deep and indestructible the foundations of the future.

To such a renaissance every individual and organized vehicle of spiritual power, moral force and political sagacity should concentrate its maximum energy, for after nearly four years of war, the people in every belligerent land are plastic, sensitive, and expectant. The objects we set before us will determine whether weal or woe is to emerge from this hell upon earth; whether we shall go forward with schemes of

regeneration that will fire the imagination of the people or go back to revolution and chaos. That is the great issue.

There is no limit to the money available for killing men abroad, and it is time the richest country in the world gave up urging lack of means for saving them at home. The responsibility for determining the character of the new kingdom is grave and imperious. The opportunity for redeeming change is here and now.

Shall our children's children suffer because we have betrayed so mighty a trust ?

CHAPTER II

THE DECLINING BIRTH-RATE

It is probably no exaggeration to say that the decline in the birth-rate¹ which has taken place in England and France during the last forty years, together with the neglect of child life, are responsible for the war. Had the one remained stationary and the other been abolished the available forces in the two countries would have effectually prevented Germany assuming the risks involved. If, however, she had been guilty of the incredible folly, there can be little doubt the war would now have been over, and we should have been numerous enough and strong enough to face the future without anxiety.

But, taking things as they are, and not as under more favourable circumstances they might have been, the significant fact is apparent to the most superficial observation that the war is being won, not by those who for reasons good, bad or indifferent have evaded the God-ordained duty of continuing the race, but by those who have had children.

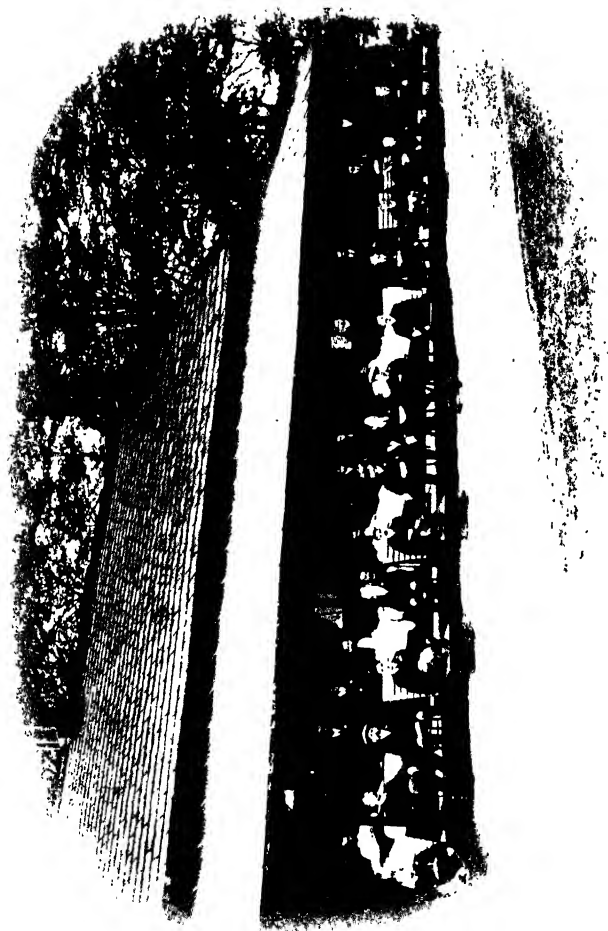
It will be equally clear that single men and

¹ See Appendix.

women, and childless married people owe their security of person and property, and freedom from anxiety, to that section of the community, denied by the State which it maintains and the industries it mans, the tangible recognition and concrete help without which the birth-rate will continue to decline and the State to decay.

If the higher civilization we claim is to continue to influence the world, we cannot allow our numbers to fall more rapidly than those of nations and empires which stand for meaner conceptions and grosser forms of life. Such numbers cannot be maintained, however, unless drastic measures are immediately taken to avert this national calamity.

Great Britain has unconsciously become an old and dying community ; old, because owing to the declining birth-rate of the last forty years there are now three middle-aged persons for every two young children ; and dying, because, apart from the war, the progressively growing disproportion means that notwithstanding increasing longevity and the fall in infantile mortality the deaths of old people must ultimately exceed the births of infants. To this well-defined trend, we have now to add the rapidly extending employment of women in new fields of service which, though a necessary emergency measure, is likely to become more or less permanent and, with the terrible loss at the Front of those who would otherwise have been our best fathers, is bound to increase still further the ominous fall. If we



BIERLEY HALL SANATORIUM A PAVILION.

are to have a future, the declining birth-rate must be arrested and healthy life take the place of unnecessary death.

From 1876 to 1914 the birth-rate in Bradford fell from 40 per 1,000 of the population to less than 20, which means that if the births in 1914 had been relatively as numerous as they were in 1876, instead of some 5,700 infants being born, the number would have been about 12,000. Thus, apart from the influx of population from outside—the middle-aged people were born when twice as many infants came into the world as at present, while the young men and women of the City were born when the birth-rate was 50 per cent. higher than now.

This is equivalent to turning the pyramid on to its apex and contemplating a material extension of national responsibility with an ever diminishing number of recruits.

If the sacrifice of mothers and infants which was going on in this country before the war were to continue for the next seventy years, it would mean that in England and Wales alone half a million mothers, and, including the estimated deaths before birth and those within the first year of life, $17\frac{1}{2}$ million infants would be lost to the State, or as many as the aggregate mortality of all the belligerents is expected to reach in the greatest war in history.

In the brief space of twenty years we should lose five million babies, a number equal to the total voluntary enlistment upon which the King

so justly and generously congratulated his people.

There must be something fundamentally wrong with the education and training of those comparatively well-to-do people who are largely responsible for the present position, for it is obvious that their conceptions of duty to themselves, the nation and the race, have fallen before the persistent onslaughts of pleasure, comfort and ease.

It is probably safe to say that if Malthus could return, he would be the first to admit that his doctrine had operated at the wrong end of the social scale, had been the victim of incredible perversions, and had met with disastrous success. This singularly high-minded man was afraid that the population would increase faster than the means of subsistence—a fear which subsequent experience has proved to be unfounded, and one which the stress of war is likely still further to remove, by compelling us to demonstrate that our own land is capable of producing an infinitely greater supply of food than it has ever before yielded. Malthus's remedy, be it noted, was "moral restraint" which, by promoting self-control, would have proved as mighty a blessing as the all-too-common adoption of malpractices which undermine it has been a curse. Although his book was first published in 1798, and he died in 1834, before his doctrine had had time to percolate far through Society, he lived long enough to say: "It is probable that, having found the bow bent too much one way, I was



BIERLEY HALL SANATORIUM LAKES AND DRUIDICAL REMAINS

induced to bend it too much the other way in order to make it straight." Malthusianism has proved how much easier it is for a man of lofty purpose to institute great social changes than to direct or control them once they have passed out of his hands. This truth is emphasized by the fact that some of Malthus's most influential successors actually opposed all social betterment on the ground that an increase of comfort would lead to an increase of numbers, and so the last state of things would be worse than the first. That fear, like its predecessor, has been exorcised by experience, for it is notorious that the births have long been lowest where the standard of comfort has been highest.

The position is in reality much worse than appears on the surface, for the declining birth-rate does not mean an all-round drop from large families to moderate ones, but occurs in the upper working and middle classes, where the fall is far too quickly approaching no families at all ; so that an ever-increasing proportion of our imperial race is coming from the poorest stock and being born into the worst possible conditions. Could the "moral restraint" which Malthus urged as the remedy have been confined to the slums, where the unfit keep on multiplying their offspring, much of what we now deplore would have ceased and the dawn of a better day been in sight ; but, instead, it is in these very places where a high birth-rate remains and forms the most distressing feature of the child-welfare problem.

It is true that, in consequence of the ultra-commercial instinct being gradually overborne by a growing appreciation of the need for new life, infant mortality has been materially reduced, but that is not to be accounted for by the rising quality of the births nor the smaller size of the families. The extra care that outside agencies have extended to the children after they were born, together with slowly improving social and industrial conditions, and the sanitary, hygienic and educational advance that has accompanied them, are the responsible factors. If, however, similar means had been available forty years ago, when the birth-rate was at its highest, the results would have been equally beneficial and the solution of the terrible problem correspondingly nearer. But it is surely unnecessary to point out that such facts constitute no answer to deliberate and artificially produced sterility among those whose physical condition and economic circumstances make parentage not only desirable but a supreme duty ; for nothing that child-welfare agencies and an improving social outlook can hope to accomplish will ever compensate the nation for the absence of births amongst the fittest sections of the community. Consequently, it is by turning their attention to that aspect of the problem that Malthusians should seek to improve the standard of infant life, for until pride of parentage can be developed in such individuals, and the nation is prepared to recognize this development by endowing motherhood, we shall

have to rely upon child-life which comes from indifferent stock and has to forge its way through a destroying tangle of adverse circumstances. Much can now be done to save and prolong the lives of such children—many of whom should never have been born—and to rear, in spite of a soul-destroying environment, delicate human weeds; but that is neither race nor empire building, and the fact that in the twentieth century such duties remain to be done proves how far the nation is removed from practising the Christianity it professes.

Until, however, our retributory standard of values—which in war and peace alike makes the conscription of life as easy as the conscription of wealth is hard—has been completely revolutionised, and the Master's answer to the studiously ignored question: "Who is my neighbour?" has been accepted and acted upon, the conditions that kill and maim will be permitted to continue their work of man-marring, while conscience-searing money-making goes on apace. In the same way the all-too-common practice of restricting families by artificial means, instead of by "moral restraint," will inevitably keep on lowering the standard of the character of those responsible for it, and multiply that deliberate sterility which destroys the redeeming love that child-life calls forth. How can a nation prosper and become truly great and free if its best stock persists in solving the problem of infant deaths by stopping infant births and not only depriving the

future of those upon whom alone it can in reality depend, but fostering a species of race-decadence which ultimately leads to that goal from which history proves there is no return? An enormous number of married people who are responsible for their childlessness have overlooked the fact that the circle of friendship dwindles with the years, and unless the vacancies can be filled with the inimitable gladness and infectious joy of grandchildren, who never weary of those who love them, the advancing years close in more pathetically lonely and sad than words can depict!

In Bradford in 1914 the average infantile death-rate in the three best wards of the City was 59 per 1,000 births, while in the three worst wards it reached 176, or three times as many, and the death-rate is a fairly reliable index of the damage rate amongst those who survive.

The prospect of an "equal chance" in such conditions is ridiculous when compared with that of a home blessed with adequate means, education and the protection these have the power to provide. The expectant mother in such a home consults her doctor early, receives from him all the supervision and advice of which he is capable, a qualified nurse is called in before the child is born and all that forethought and skill can supply are bestowed alike upon mother and child. Why should two infants who are not responsible for their existence be subjected to such strangely different welcomes? Will the



BIERLEY HALL SANATORIUM IN THE GROUNDS • OFF DUTY

same divergence of treatment be meted out to them in heaven, and, if not, can the churches explain why it is permitted here; for nothing more than they have the power to do is needed to provide the "equal chance," and even Christianity itself depends, in more senses than one, upon the birth-rate in countries which claim to believe in it.

It must be remembered that the declining birth-rate is indicative of lowering morals. In Bradford the proportion of illegitimate births to total births rose from 4·3 per cent. in 1907 to 6·0 per cent. in 1914, while deaths are gravely multiplied by procuring abortion—which ought to be called murder—and, where the attempt fails, the child all too frequently crosses the threshold of life only to succumb, or lead a maimed and crippled existence. The impunity with which advertisements for procuring abortion may be inserted in the Press, and the easy manner in which drugs can be bought for the purpose, is an appalling public scandal which calls for immediate and stringent suppression. Were these "not wanted" children—who are worse than orphans—deducted from the legitimate births, the fall would be still more marked.

There is another aspect of this grave and urgent problem which is of supreme importance to the State, for here, as always, retribution walks in the footsteps of neglected duty. The inexpressible joys of motherhood can never be known in a childless home, and for that reason "mother-

love," the most God-like attribute in the world, is being sacrificed to human folly and national unconcern. Mother-love is the response to the appeal of the most helpless form of life on earth, for an infant cannot even find its own way to its mother's breast. It is the outpouring of a love she did not possess until that frail being, which is flesh of her flesh, was ushered into this mysterious and unfolding universe.

Though she knows not what may be her child's ultimate destiny she prays that its life may enrich the world; fortunately, none may deny the possibility, for human wisdom has not yet been able to determine in which cradle the genius is being rocked or under what roofs the world's saviours are being reared. God has provided them both, and the mystery of their whereabouts is the salvation of the poor. If this mighty fulcrum of mother-love is to be sacrificed, the British Empire will pass like a dream. Surely the heroism of war is not to be accompanied by the cowardice of peace. If men are willing to make the supreme sacrifice by laying down their lives for the nation, women, with reasonable encouragement and help, will not shrink from serving God in the sacred office of motherhood on which the salvation of the world depends. Greece died for want of children, and the finest civilization in history was lost because the solution of its declining birth-rate was too long delayed. To be fore-warned is to be fore-armed. Are we wise enough to learn the lesson, or must



we, too, deprive the world of the service it is in our power to render? Consciously or unconsciously we are approaching the time when we shall have to decide whether the nation, for want of children, is to be hurled down the hill of progress up which our fathers struggled through long, weary years that we might be free, or whether, because of an ever-increasing number of healthy, intelligent and happy children it is to climb with redoubled energy to more glorious summits.

In normal times we have been too thoughtless to recognize that life, the one thing without which all else must perish, has been slipping from us with a rapidity which threatens the State. To that sad fact has now to be added the loss of our brave lads abroad, and unless we recognize the duty of filling the cots as being no less vital and patriotic than that of manning the trenches, we shall convert a glorious victory into an ultimate and self-imposed defeat. Death can only be compensated for by birth.

CHAPTER III

HOUSING

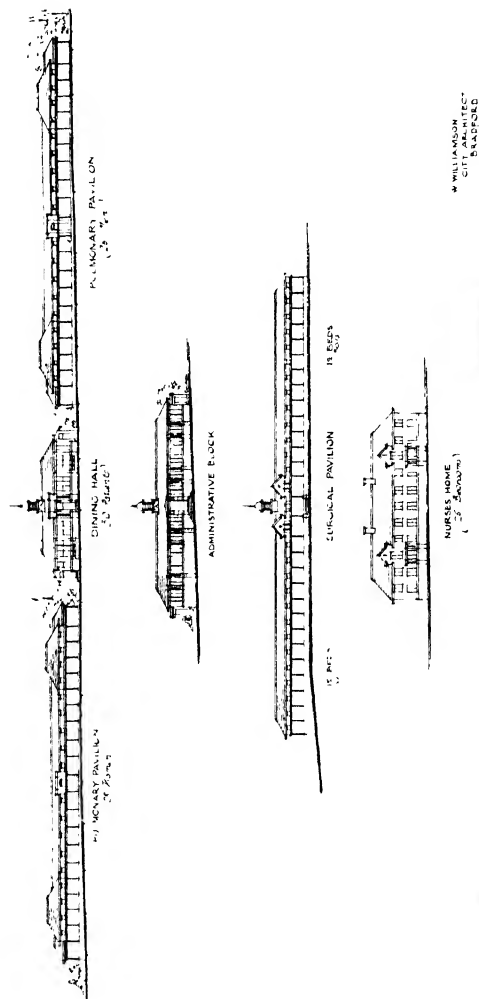
HISTORY consistently demonstrates that the well-being (in contradistinction to the material success) of nations and men is ultimately determined by the unseen forces that fashion character and conduct.

Nevertheless, human judgment, or to speak more accurately, human will, still declines to accept and profit by this teaching and to create the conditions which would welcome those subtle, God-given forces and invite them to spread their beneficent influence amongst us.

Worldly wisdom continues to act as though the temporal things which may be seen and handled were, for that very reason, the eternal, and treats as temporal the eternal spirit of truth and love which evades its materialistic comprehension.

This sadly miscalled "practical" world prides itself in exalting everything which appears to it to yield tangible results, and in discounting ideals which it regards as speculative and troublesome. The "practical" type of mind has always presented a defiant front to new ideas, and drawn the blinds on the possible approach of new light ;

CITY TUBERCULOSIS HOSPITAL, BIERLEY HALL. *South Elevations of Buildings*



BIERLEY HALL SANATORIUM PROPOSED EXTENSION (80 BEDS)

it only "entertains angels unawares" for fear such suspected visitants should disturb some preconceived notion or threaten the established complacency of its strongholds. Disdaining serious reflection it does not realize that such conduct—however well-intentioned—unconsciously converts its supposed impregnable fortresses into beleaguered plains, dependent upon the goodwill of the "enemy"; ignoring the fact that though fundamental verities are independent of flesh and blood, they can only operate through the daily lives of men.

The housing of the working classes constitutes one of the most discreditable chapters in the dull record of the social life of the people. Before the war, housing accommodation was absolutely insufficient and unsuitable, while the prohibition of building during the war has served to make the problem more acute. Naturally the shortage presses most heavily in large towns and it is significant that the recent Report of the Commission of Enquiry into Industrial Unrest called special attention to bad housing as being one of the contributing factors among the workers.

Industrial unrest is a serious symptom at any time, but it would be fatal in the period of reconstruction that must follow the war when the country will need every ounce of energy possessed by the total body of producers, whether hand or head workers. If the State is to reach its maximum output, it must have its great labour army contented and healthy, and to these ends proper

housing conditions will very largely contribute.

In the great industrial centres, "where wealth accumulates and men decay," workshops, factories, and warehouses have competed with mean dwellings for standing room on congested areas, intersected by short, narrow, crooked streets, overhung with a thick canopy of health-destroying black smoke, under which flowers cannot grow nor birds sing. In such an environment men and women have existed with inadequate accommodation for the sexes, an almost total absence of domestic convenience and comfort, and with no means of bringing nature's colour and gladness into the dead monotony of their children's lives.

Those most familiar with the housing conditions under which successful magnates live on the one hand, and those of the overwhelming proportion of the wage earners on the other, can only marvel at the patience and patriotism which the latter exhibit, and cease to wonder why, prior to the war, as many emigrants left the old country for the colonies in a single year as the aggregate population of Sheffield.

The lack of ideas and ideals among local authorities, whose members have been more concerned in the making of money than the making of men, has allowed this higgledy-piggledy throwing together of the human and material instruments of the "workshop of the world," with the result that wretchedness and squalor, drink and disease, immorality and crime, have been catered for, and have poured their victims into costly work-



BIERLEY HALL POULTRY FARM. GENERAL VIEW

houses, prisons, hospitals, asylums, and kindred institutions with a prodigality we have failed to appreciate because we have not been sufficiently interested to inquire the price of our folly. These endeavours to cure what could, and should, have been prevented, have involved more than the waste of money. The human assets of the State have been transformed into national liabilities; the work of moral and religious agencies struggling to raise the depressing lives of the people has been neutralized. The problem is now being lifted out of the hands of the speculative builder largely because the terrible lessons of the war, and the necessity for finding employment on the demobilization of the army leave no choice, but whatever be the motive, opportunity is now given us to profit by the costly and painful experiences of the past, and to remember that we are not going to build for to-day alone, but also for the to-morrow of half a century hence, when our children's children will judge us by our actions.

Does it ever occur to us to ask how far this housing question bears upon the declining birth-rate and infant mortality, which is so terrible that, "If the death-rate in the first fortnight of life were maintained for ten months, every child would die." Now, the question arises as to whether mothers should be relieved of their children or of needless drudgery. If we desire to undermine home life instead of strengthen it, we shall institute nursery schools and leave mothers struggling with heavy work; but if we

want a finer race, we shall determine that mothers shall be mothers, looking after their own little ones, and not slaves weighed down with toil that the most elementary consideration could remove. Is there any wonder that in dwellings of four rooms and under, which constitute 60 per cent. of the aggregate, and are obviously the homes of the working-classes, the death-rate is twice as high as in houses of five rooms and over, where the middle and upper classes live?

It will probably help to an understanding of the need for better treatment of mothers and children if concrete illustrations are given of the conditions under which an ever-increasing proportion of the parents of the race live and work in Bradford, the seat of the worsted industry, and one of the most prosperous cities in the kingdom. For, though the details of the problem vary in places with widely different conditions and callings, the broad underlying features have much in common all the world over. The figures to be quoted—unless otherwise mentioned—will refer to 1914, as those of a later period would, owing to the war, be abnormal and therefore misleading. In Bradford, 75 per cent. of the working classes live in back-to-back houses—probably a larger proportion than can be found in any other city of the kingdom—and this class of dwelling has not only been condemned by the Local Government Board, but the erection of such houses has been prohibited by Parliament since 1909.

At the last census, over 26,000 persons—or

9·3 per cent. of the total population of the city—were living in overcrowded houses, to the physical, mental and moral deterioration of every man, woman and child in them. The truth of this statement may be shown by taking a much wider survey. Three-fifths of the inhabitants of Bradford live in houses of four rooms and under, and the remaining two-fifths in dwellings of five rooms and over. If the death-rate in the smaller houses were the same as in the larger ones, only half the number of people would die in them, and, *per contra*, if the mortality in the large houses were as heavy as it is in the small ones, double the number of their better-class occupants would succumb. In the three best wards of the city—by no means ideal—in what was practically the pre-war, and therefore normal, year of 1914, infantile mortality, as has already been stated, was 59 per 1,000 births, while in the three worst wards the figure was 176, or three times greater in the squalor of the centre than in the purer air of the outskirts. The death-rate in the slums, however, is six times greater than in the suburbs, because twice as many infants are born in squalor as in comfort.

But for fear this taking of extreme wards should leave a false impression behind, let us take the death-rate of the whole city in relation to the size of the dwellings in the strictly normal and pre-war year of 1913 :

Rooms per house	1 & 2	3	4	above
Death-rate per 1,000 . . .	25	20	12·4	8·6

These figures prove that when the general mortality of the whole city is considered in the light of house accommodation, exactly the same conclusions are reached, for the death-rate is found to be three times as high in dwellings which consist of one and two rooms as in those of five rooms and over, and the intermediate conditions lead to corresponding results.

Slums and suburbs may be separated by distance, and a large and varied intermediate class of people, but neither can live as though the other had no existence; each, however unconsciously, acts and reacts upon the other. In public streets, places of amusement, trains, trams, factories, workshops and other common gathering grounds, the whole community is brought more or less into direct and immediate contact, and is compelled to rub shoulder to shoulder; and the association inevitably influences physical, mental and moral standards.

When an infectious disease is epidemic, when industrial strikes are dislocating customary routine, and when the horrors of war threaten the nation's existence, we begin to realize our interdependence, but in normal times we fail to appreciate that a city, like a family, is so far one that neither individuals nor sections can dispense with each other, and that the only way to secure the happiness and prosperity of the whole is to promote the well-being of each individual. Why cannot we compete less and co-operate more, so that mutual consideration and help may accomplish



BIERLEY HALL POULTRY FARM INCUBATOR AND FOOD HOUSES.

what isolation and drift (commonly called "mind-ing one's own business") only destroy?

Knowledge and imagination throw a lurid light upon these conditions which so largely constitute the setting for child and mother and intensify the realization of the grave issues which must be faced. There is not only ignorance, indifference and neglect on the part of parents to contend with, but still more culpable carelessness on the part of their critics and the community, who permit such unnecessary "slaughter of the innocents" to continue; and it may be taken for granted that if Britain does not pull the slums down, those who come out of them will ultimately pull Britain down. Even a superficial glance at the present slum problem gives evidence enough to thoughtful people of its national significance. There are over 72,000 houses in Bradford, and if seventy years were regarded as a reasonable average life, it would mean that 1,000 should be built every year to make good the national decay. During the last twelve years, however, only 4,778 have been erected, or an average of 398 per annum.

In the same period, about 1,100 dwellings only have been closed as unfit for human habitation because of the rapidly growing scarcity of houses. For the same reason, the owners of some 600 of these have been permitted to make structural alterations and repairs and again accept tenants, leaving a net decrease on this account of some 500 houses. Under present conditions,

it is impossible to build good houses at rents which those for whom they are intended can afford to pay. This leaves us with the alternative of erecting unsuitable dwellings or of subsidizing better ones. Every agency and individual working for the future, particularly women—for housing is essentially a woman's question—should realize that they may have to face the erection, under the guise of a war-time emergency, of an abnormally large number of cheap and standardized dwellings as ill-calculated to meet the reasonable and permanent needs of those for whom they are intended as the temporary military hospitals and buildings will be found to provide for the after-war requirements of the civilian population.

If standardization means what is commonly understood by it, it is a huge and fatal blunder, leading back to the old Poor Law conceptions and ever-increasing slumdom, rather than forward to the new and more equitable social order which every truly patriotic man and woman so earnestly longs to see established.

If, on the other hand, standardization means something totally different, it is a thousand pities that the word should ever have been used in this connexion. It can, of course, be made easy and cheap for the present, but it would be disastrous to the future, and stultify every ideal we are seeking to realize, while the enormous sums of money we are spending on these redeeming activities would be worse than thrown away. Surely the desire for better things should lead



BIERLEY HALL POULTRY FARM. INCUBATOR ROOM

to the building of houses calculated to meet not only the widely divergent conditions of locality, altitude, exposure, industries, habits and customs of each neighbourhood, but the imperative need for bringing the influence of good books, pictures and music into the unimaginative lives of those who lack these opportunities for beauty and gladness.

Comparatively speaking, the dwellings of the rank and file are in congested areas, and those of the well-to-do are out in the country, but there is as little justification for that as for the unsuitable character of working-class houses. There are said to be some 77,000,000 acres of land in the United Kingdom, and about 9,000,000 dwellings, so that if each family were given half an acre it would only amount to 4,500,000 acres out of the 77,000,000. Before the war, though only 23 per cent. of the Belgian people were employed on the land, 56½ per cent. lived in the country, with tremendous advantage to themselves and their children. There is nothing to prevent that example being followed here if we are willing to put life before money.

Instead of letting the favoured few live in the midst of green fields, spreading trees, singing birds and meandering brooks, and the many in or near the centres of cities, why cannot we send the many out into the country and leave as few as possible near the towns, at the same time prohibiting the erection of houses on industrial sites, and industrial concerns on housing sites? Cheap and

convenient transit, the rapid development and centralizing of industries, and the natural decay of dwellings near them, make the process a necessity, if human betterment is to have a chance.¹

Land in the centre of cities is far too costly for workmen's dwellings, whereas in the country it is cheaper than linoleum, while the assessable value of slum property is negligible in comparison to that which would be derived from business premises erected on the same sites. Slums are notorious breeding grounds of poverty, disease, and crime, which not only make them a source of perpetual peril to the miserable denizens on the spot, but a constant menace to the well-being of everybody around them. Slum-dwellers throw upon public health authorities enormous and ever-increasing burdens. They claim by far the largest amount of Poor Law relief, provide the greatest number of offenders brought before judicial tribunals and prey upon every charitable organization. But the story is by no means one-sided, for every money-making agency seems willing to fatten on their necessity; they constitute the prey of the rack-renter—often an

¹ Fortunately for the future, re-housing on the same sites is prohibited in two ways, first, by the wise decision of the Local Government Board not to permit the erection of more than twelve houses per acre, a proviso which obviously makes central schemes impossible, and second, because the cost of bare land after purchasing, demolishing, and clearing the derelict property upon it, would be exorbitant, as is proved by the experience of great cities where that retrograde policy has been tried, and where, strange to say, the land works out at a comparatively uniform average of 25s. per yard, or £6,050 per acre.



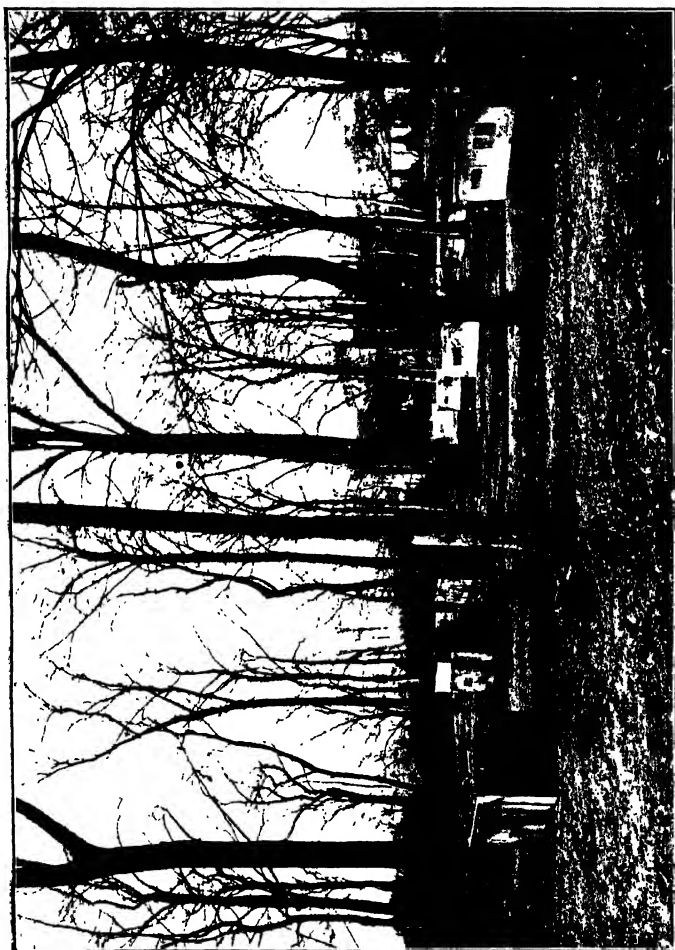
eminently respectable person hiding behind a callous nominee—the hire-purchase extortioner, and the doubtful food purveyor. Even licensing magistrates conspire against their redemption, for though these authorities decline to have suburbs ruined by drinking facilities, they permit public-houses to be most numerous where the power to resist their temptation is notoriously small. The damning records of police court proceedings make it unmistakably clear that magistrates should either act in slums as they do in suburbs, or give up passing sentence on the victims of their own folly. The fact that Parliament has deliberately excluded from supervision clubs, which are in many respects more seductive and dangerous than public-houses, proves that even in a democratic assembly this mighty vested interest, this accursed enemy of our children, takes precedence over public welfare and advancement.

If instead of being gifted with mental, moral and spiritual attributes, women were animals, maintained to supply the State with children, neither they nor their young would be permitted to live a single day in the slums, because, as stock-breeders, we should know that “it would not pay.” If it would not pay under those circumstances, will it pay to rear the noblest work of God with less consideration and care than are every day bestowed upon gentlemen’s parks, conservatories and stables?

If these rookeries of evil were part and parcel of some great business trust, the commercial

mind would immediately sweep them out of existence because it estimates profits, not only by money made, but by economies effected. Unfortunately, we leave unchecked a habit of mind which regards collective redemption from the opposite point of view to private advancement and, in public work, men will approach equivalent problems quite differently. Local authorities, for instance, commonly believe that the best way both to make money and to save it, is not to spend it. Obviously, the present unequal distribution of wealth in this country makes decent living for the masses impossible. If the powers that be would frankly recognize this fact, and in the light of it bring the same business acumen to bear on housing that is every day exhibited in industrial concerns, they would find it a wonderfully profitable investment of public money to raze all slums to the ground, prohibit the erection of houses in the centre of great cities, and build on the outskirts, in fresh air and amid green fields, well spread out and carefully planned modern colonies for the people, controlled by thoroughly capable and sympathetic agencies whose duty it would be to prevent evil by creating a healthier environment.

Politicians give the de-humanised occupiers of slums a wide berth, except when votes are wanted, and then impose upon their weakness and credulity for party purposes; while the Churches frequently go where the call is most congenial, leaving the Salvation Army to fight



BIERLEY HALL POULTRY FARM. FOSTER-MOTHERS.

the good fight against overwhelming odds and with ridiculously inadequate means.

“ Oh ! wad some power the giftie gie us
To see oursel as ithers see us.”

Most of us have but a faint idea of the antagonistic forces at work in these hotbeds of misery and despair, where physical degeneracy and moral and spiritual deterioration are constantly undermining the most prolific sections of the community. Yet it is because we allow these sinks of iniquity, cradles of disease and coffins of death, to constitute the environment into which an ever-increasing proportion of our race is being born, that it is possible and necessary for Sir George Newman, Medical Officer of the Board of Education, to report that out of, approximately, 6,000,000 children of school age, no fewer than 250,000 are seriously crippled, invalided or disabled ; while a further 1,000,000 are so physically or mentally defective or diseased as to be unable to derive reasonable benefit from their State education. This is after one child in every four under one year of age has died either before or after birth.

At the census of 1901, it was stated that there were 483,000 degenerates in the United Kingdom, while the medical officer of a large prison regards 40 per cent. of the boys admitted as mentally defective, and 70 per cent. in homes of retreat are similarly afflicted.

Probably not less than 10 per cent. of the population is constantly under medical treatment in

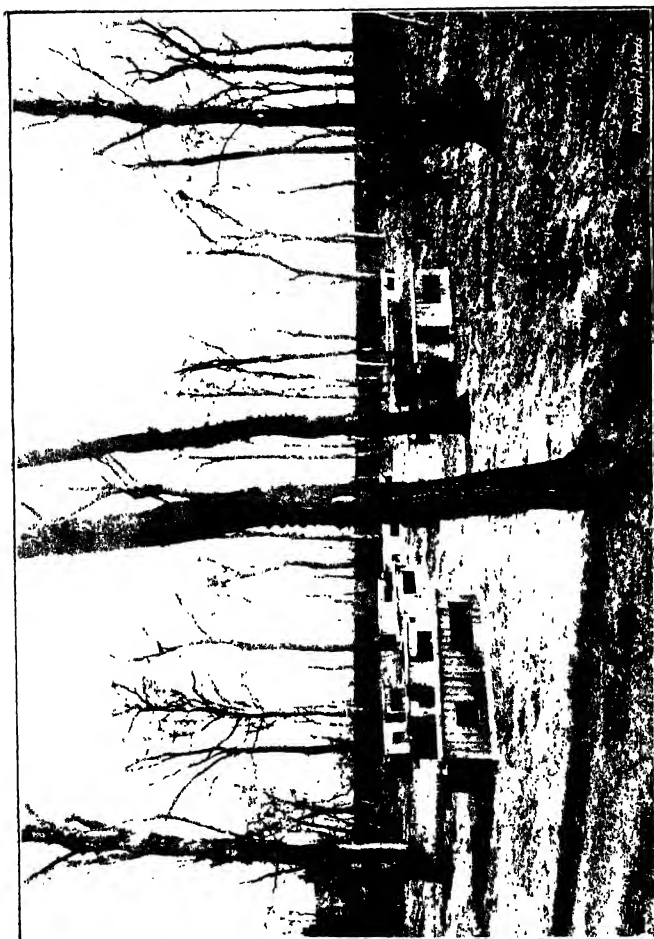
public institutions and private dwellings, while so long as housing conditions remain what they are, doctors despair of effecting any radical cure of pulmonary tuberculosis, which, owing to the war, will soon be responsible for carrying off over a tenth of the population of Great Britain.

If these statements be true of the country as a whole, what must be the slums' contribution to the terrible indictment? Talk about the burden involved in the provision of decent housing accommodation; what is the cost, direct and indirect, which these dens of ignorance and shame impose upon the community every day in the week, all the year round? Can any one estimate the handicap to this and succeeding generations imposed upon our activities and progress? Is anything cheap that destroys and maims the physical, mental and moral lives of men, women and children; nay, can anything be ultimately beneficial, even financially, that fails to make us into nobler creatures of God? Parliament, municipalities, and Churches ought to hide their heads in shame till these pestilential hovels have been swept out of existence. What can maternity and child welfare schemes do to abolish infantile mortality and the damage rate arising from such diabolic conditions? Let those misanthropes who never grow weary of grumbling at the money expended on other people's children, and who are for ever clamouring for impossible results, either answer or hold their peace, for "man's inhumanity to man makes countless

thousands mourn," and the effect of indifference all too frequently renders it but another form of active cruelty. It is such visionless selfishness that is responsible for the starvation of essential and abiding needs.

When dealing with housing it is necessary to bear in mind that there is a false economy which ultimately becomes gross extravagance, and that it is usually urged upon local authorities by those who afterwards make capital out of its ultimate failure. Such is the plausible suggestion that new houses should be built for those whom private owners are most anxious to get rid of, though it is only fair to say that the people concerned often compare favourably with the property they occupy. This policy of putting new cloth into old garments really means the erection of subsidized concentration camps, or pill-boxes for derelicts, and comes from those who perpetually denounce what they call public contributions for private purposes. When, however, rates are to be used to provide unprofitable accommodation for their bad tenants, these people not only take no exception, but actually give their enthusiastic approval to the pernicious principle, because the effect is to make them the indirect recipients of the bounty. The suggestion to transfer the inhabitants of slums to modern dwellings and facilities is, however, undesirable and even impossible, for experience proves that they will not go. Even if they were willing, this side-tracking of the main issue would not produce any equivalent result; but to keep

on building new and better houses on more desirable sites, and let those best able to appreciate them become the tenants, is to do such people good, and to render equivalent service to those lower down in the social scale, by enabling them to step up into the dwellings vacated which, in so far as they are better than those previously occupied, are as much new houses as the actual new ones to which their predecessors have gone. Houses, like books, need education and experience before they can be valued at their proper worth, and in the absence of the ability intelligently to appreciate and use them, good things are worse than wasted, because in providing them for people who cannot be expected to jump over the intermediate stages, we are withholding them from those to whom they would be a real stimulus and help. The past has done its de-humanising work on slum dwellers, and they cannot act as though it had never been, any more than a child can go from the first standard to the sixth at a single bound. We shall best serve the public interest, not by trying to reduce the problem to the dimensions of the slums, for though that aspect of it is undoubtedly important it constitutes but a small part of the whole, which embraces the greater proportion of the working and lower middle classes. We must therefore keep on raising the standard of the entire community by condemning houses that have obviously served their day and generation and by providing new and better ones to replace them, all the while



Richard, 1920

BIERLEY HALL POULTRY FARM. COOL BROODERS.

pushing the people forward in stages, from the centre towards an ever-widening circumference, and in the process simplifying and reducing the routine and unnecessary work in the home in order to give more leisure for the essentials of life. Thus we shall slowly but surely elevate the race.

To do this, houses, like machinery, must be subjected to some recognized and adequate standard of depreciation. Machinery only retains value so long as it is capable of producing, in a competitive market, the things that meet the needs it exists to supply. But the provision of houses is usually kept below the demand, so that instead of dwellings seeking tenants, as goods have to find customers, tenants have to go in search of dwellings, with the result that the rents of the worst houses are out of all proportion to the accommodation, and in spite of their unfitness for reasonable human needs, they are almost invariably occupied. Occupation rather than soundness of structure, healthy conditions and domestic convenience, is accepted as proof of fitness, hence the belief that so long as they will stand upright, houses should not be condemned, whatever physical and moral deterioration is coming from them. Not only so, but the original owners often anticipate indications of decay by selling to people with less knowledge of falling values of property and their dilapidations, who, regarding such properties as a permanent investment, are liable to assume they are getting a bargain. Such buyers often discover, when it is

too late, not only the meaning of a heavy mortgage debt, but also the constant drain of expenditure without which the house cannot even be kept fit for human habitation, much less be maintained as a desirable dwelling. They are all too frequently impecunious persons who buy decadent property under the delusion that they will only have the privilege of drawing rents, not the responsibility of keeping their houses in reasonable repair, and they constitute the unfortunate class whom sanitary authorities are far too often credited with bringing to ruin and the workhouse.

It may be objected that too much stress has been laid in these pages upon the short-sighted policy which seeks to accumulate wealth at the expense of life. But there is often no way of reaching dulled ears except by the constant reiteration of vital truths.

Houses must not be built for profit but must be convenient and comfortable homes for people to live in.

Through trusting to private enterprise we have, according to the census of 1911, been left with 3,140,000 persons living in a state of overcrowding in England and Wales alone, while the same return for the same area shows that we have :

483,000 persons living in 1 room.
2,098,000 persons living in 2 rooms.
4,429,000 persons living in 3 rooms.

Overcrowding is inevitably responsible for a considerable amount of drinking, loose morality and crime, necessitating the maintenance of police,



ODSAL SANATORIUM. WARDS AND ADMINISTRATIVE BLOCK.

prisons, workhouses and asylums at the public expense. In so far as these institutions are the result of bad housing, it is clear that the owners concerned should be debited with their cost. Disease usually breaks out in hovels and slums, which are a constant menace to the health of the community and are largely responsible for the expenditure involved in costly public health departments, infectious diseases hospitals, dispensaries, sanatoria and domiciliary treatment.

Is it unfair to the owners concerned to suggest that whatever proportion of that expenditure arises from the existence of rookeries, called houses, should be taken from the rents instead of extracted from the public purse? From the private owners' point of view, it pays to have tenants seeking houses, rather than houses waiting for tenants, and so the whole system puts a premium on shortage, high rents and overcrowding, together with the terrible evils that grow out of them. When the public conscience is reluctantly driven to make some attempt to modify these evils it does so in the name of charity, but if we were willing to go back to causes, instead of calling a halt at remedies, we should find that justice must precede charity, and until that has been done we are responsible by our acquiescence in wrongdoing for the human scrapheaps that have grown out of it. In speaking of hovels and slums we refer of course to the places where these things are most acute, but these are not the

only areas where bad housing is to be found. Many working-class dwellings suffer from lack of the most elementary domestic conveniences, defective light, insufficient ventilation, dampness and insanitary conditions. Indeed, if such perfectly reasonable charges as have been suggested were debited against the owners of the property responsible for them, it would be found that these people are not ratepayers at all, but very substantial rate-drawers ; and that as a matter of fact their business is heavily subsidized out of the public purse, or it would pass through the bankruptcy court and the menacing property be demolished. It would also have the beneficial effect that houses would be better constructed and maintained, because jerry-building and hovel-owning would not pay.

In the light of past injustices, there is little wonder that people feel chary of trusting housing reforms to private enterprise, for if the duty of building houses be transferred to local authorities their inducement to erect and maintain good property will be obvious, for both they and the public they exist to serve will be rewarded by correspondingly decreased charges for the support of institutions which are rendered necessary by the existence of houses that cannot by any stretch of imagination be called homes.

Such an inducement to municipalities is far more likely to be effective than all the repressive measures that can be imposed upon private owners. There is at present a real and alarming

shortage of working-class dwellings which private enterprise has done nothing to meet. If the general building trade is quiet, a man will often erect houses to keep his men together ; if labour and material are cheap, and he sees what he regards as a fair margin of profit, he will build working-class dwellings, but in every instance the determining motive is profit, not need, for that has been abnormal since before the war broke out and has grown more acute and menacing ever since. Local authorities have built little, and if private owners and private builders, who are always well represented on public bodies, had had their way, they would not have been permitted to build at all. When, however, they have erected dwellings—and the proportion is said not to exceed 3 per cent. of the whole—it has been to supply a public need that private enterprise, with its 97 per cent. of the aggregate number of houses, has failed to meet. That has often obliged them to build when prices were comparatively high, and they always insist that the recognized standard rate of wages shall be paid, conditions the private builder does not impose upon himself. Further, before public bodies can build they have to get borrowing powers from the Local Government Board which impose upon them interest and sinking fund charges compelling repayment within a specified number of years—say 60 for buildings and 80 for land. This means that at the end of that time both the houses, and the land they cover, are an untrammelled asset

for the community to the extent of their then present value.

There is another outstanding reason why municipalities should build the houses of the future for the workers. For many years ingenuity, resource and adaptability have been working out a silent revolution in industry and commerce. In the worsted trade, for instance, comb pots, spinning jennies and hand looms have given way to combing machines, spinning frames and power looms with wonderful results. But the cause of all this commendable enterprise has been the making of private profit.

Now turn to working-class dwellings, where mothers live who supply industry with labour and maintain the race ; mothers who work longer hours for less pay and less recognition than any other section of the community.

Little or nothing has been done by private enterprise to save these women unnecessary and unremunerative drudgery, for a home is not the place where private profit may be made ; it is only the place where life is produced and developed—life, the one thing without which all else must perish !

Such a system stands self-condemned, for it sacrifices the future to the present, and accumulates the wealth of to-day at the expense, and to the detriment, of the life of to-morrow. Mothers' work is the greatest work in the world, and whatever exalts mothers and the



ODSAL SANATORIUM. BACK VIEW OF THE ADMINISTRATIVE BLOCK.

homes in which their gracious influence is felt exalts Britain as surely as the forces which neglect or degrade them would ultimately bring her to ruin. To thoughtful people not blinded by material interests and financial gain, this must surely be apparent and why, in the light of it, we have not long since focussed our attention on devising ways and means for their betterment, it is impossible to say. Probably the fact that everything is now valued by a money standard, and that humble homes scarcely have one, is the chief reason for our indifference. If instead of hundreds of thousands of individual homes, we had hundreds of homes each containing thousands of families, such aggregations would be a force to be reckoned with ; but because we divide our homes into separate units, the power of organized expression is lost, and in these days we only take account of big things, which, if ignored, become troublesome or dangerous. Corporate capacity, not real worth or need, is our criterion of value.

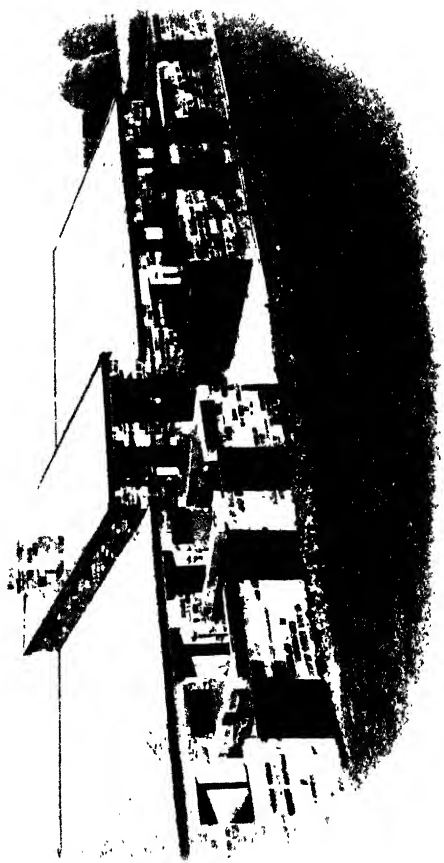
CHAPTER IV

HOUSING (*continued*)

IN many parts of the country post-war schemes of housing are already being worked out, and, as the Bradford proposals have aroused widespread interest, it may be well to give full details of them, for they are an attempt to embody the ideals set forth in the last chapter.

The scheme comprises the erection of ten self-contained model villages upon the wind-swept uplands surrounding the city. It is suggested that each of these villages should have, not only 1,000 houses of the bungalow type, but also communal cooking kitchens, laundries, hot water service, schools, libraries, recreation rooms, playing fields, allotment gardens, churches, Sunday schools, etc., and be served by trams run at a universal penny fare.

About 60,000 men have joined the colours, and in consequence wives have gone to live with parents, and mothers with children to a considerable extent; on the other hand, it is believed that some 15,000 persons have come into the city to work at war and allied trades, 5,000 of whom are thought likely to remain. In the light of



ODSAL SANATORIUM. PICGERIES

these figures, the overcrowding disclosed by the census returns, the natural increase of population, the large number of persons who come into Bradford from outlying districts by train and car, some of choice and many of necessity—owing to the shortage of houses—to earn inside the city the money they spend out, and the fact that some 3,000 dwellings ought to be closed as soon as others can be provided for those who would otherwise be homeless, the Health Committee cannot be accused of overestimating the need at 10,000 additional houses, to be erected in two lots of 5,000 each. The first practical consideration is the amount of the Government's contribution to the cost of the scheme, and until that has been ascertained definite proposals cannot be made. The subsidy, however, should be the difference between the cost of building immediately after the war, when the price of labour and material will be abnormally high, and the cost when the needs of the community have been overtaken, and a new normal price has been established. If the amount were less than that difference, we should always be confronted by the ugly possibility of the private builder waiting until the bottom had been reached, and then erecting houses at a price that would enable him to let them at lower rents than we could afford to accept, for the purpose of emptying those we had built under less favourable conditions.

Against the one-story type of dwellings no

medical or sanitary reason can be urged, or well-to-do people would not stud the countryside with their rough cast walls and red-tiled roofs, while their convenience and labour-saving advantages to mothers, who are compelled to do the whole of the work involved in keeping a house and rearing a family, are too obvious to need pointing out, particularly during periods of sickness and disablement.

Communal cooking kitchens have in them real possibilities for revolutionizing the people's food by substituting what is wholesome, palatable and fresh for the rapidly degenerating meals that would ultimately destroy the stamina of the working classes. Such kitchens, where bread could be baked and from which the meals could be fetched ready for serving in the home, would ensure a far greater variety of wholesome food, better cooking, smaller cost, and infinitely less labour than when a thousand over-worked mothers are busily engaged making a thousand separate dinners ; while it would overcome the difficulty so common in these days of the mother not troubling to make a dinner when the husband does not come home to it.

On an equitable footing, it is more than probable that far better meals than those now relied upon could be provided on a large scale for the same money now expended, and with no labour beyond that of fetching them from the kitchen to the home, a position that would be largely true of bread, for if restaurants and bakeries can be suc-

cessfully run for private profit, there is no reason in the world why such results as are foreshadowed should not be forthcoming when public service and not dividends is the object.

So far as the laundries are concerned, experience has long since eliminated the "washing day" from better-class houses, where they are far more able to deal with it than in working-men's homes, and as the communal enterprise would only have to pay its way, it is unjustifiable to expect any woman to continue the labour and disadvantages involved in washing clothes, summer and winter, in a cottage house. It may be taken for granted that on this point public opinion is agreed. At this time of day nobody questions the need for bringing a bath within easy reach of every man, woman, and child, for a peggy tub or a bowl for adults is abhorrent: a separate bath and hot water must, therefore, be provided in each house, and it is difficult to see what exception can be taken to such a proposal, if cleanliness of body and the promotion of public health are to be regarded as indispensable features in these model villages.

To make housewives heat every drop of water that is required to provide for the needs of a family, in a pan or kettle on a kitchen fire or gas stove can no longer be defended. That folly must not be perpetuated in the new dwellings, and investigation may prove that it is more economical to supply hot water from one large centre, than to put a fire-back boiler into each individual house,

which if provided would often necessitate a fire in summer when otherwise that cost would be unnecessary. The absence of such provision is not only grossly extravagant, but it puts a premium on dirt and disease, and destroys that domestic pride which is one of the finest and most valuable assets of the nation, and for the absence of which superior critics are never tired of condemning the poor.

In a recent public utterance upon the Bradford Scheme it was remarked that "it does not matter where the houses are built, so long as they are not near gas works or destructors." Under such a degrading standard of human values revolution at home is as sure to follow war abroad as night follows day: fortunately, from a financial point of view—the only medium of appeal to mercenary minds—the proposal would be disastrous, for it would involve (1) the buying by the Corporation of the present congested "rabbit warrens" and narrow streets, at the abnormal prices established by the deplorable shortage of houses; (2) the demolition, carting away and tipping of the decaying material at the public expense—where the dishoused people would go it is impossible to say; (3) the acquisition of the bare land which, being central, has very considerable value for commercial purposes in comparison to the agricultural areas we intend to acquire on the outskirts. Having followed the precedent of the Longlands improvement scheme, by writing off over 81 per cent. of the capital outlay, and reduced business sites to the value of housing sites, we



ODSAL'SANATORIUM. PIGGERIES (INTERIOR)

could then begin to build with the knowledge that so long as the houses stood, the ratepayers would be deprived of the high industrial assessments that would have been available if the land had been appropriated for the only purpose to which it ought to be put.

Whether the new houses are to be a success or a failure depends not only upon the capital outlay, but also upon the amount of unnecessary drudgery and needless toil which they eliminate, and the degree in which working women, whose thoughtfulness, consideration and care keep them busy within the four walls of the little homely domains, where men and nations are made or marred, can be provided with labour-saving and health-promoting conveniences. Such amenities as a school, a library, a recreation room, a pleasure ground and a suitable area set apart for allotments are indispensable ; the model villages must be places where, after a hard day's work, men and women can live such a natural, healthy and wholesome life as will enable them to rest and recuperate both body and mind, instead of wearing themselves out by spending their leisure hours in a smoke-laden atmosphere, teeming with the morbid excitement and distractions of modern artificial existence.

The limits of collective enterprise and helpfulness have by no means been reached ; many can do with ease what one could not even attempt ; why should we hesitate, much less decline, to encourage and develop the very best of which

mutual service is capable? It is, of course, obvious that for a time, at any rate, many would prefer to look on and see how the new venture succeeded, but as only 5,000 houses would be erected in the first instance, and only 10,000 in the aggregate, or a number capable of accommodating much less than the total enlistment, it is much more than probable that sufficient of the 300,000 inhabitants of the city would be ready to enjoy the advantages long before they could be provided.

The new housing scheme depends on the new spirit. There are, for instance, great possibilities for reducing labour, promoting cleanliness and increasing convenience, inherent in gas and electricity. If mothers are to be enabled to do their duty to their children, and enjoy sufficient leisure to make their lot more comparable with the limited working hours of men, coal fires are certainly not the last word in working-class homes, however firmly they may be rooted in our affections and prejudices. A tap or a switch turned on or off would be all that was necessary, no labour would be involved, no continual cleaning of the grate called for, far less dust would fly about the house, and only when the gas or electric fire was actually needed—which in summer would be seldom, in view of the provision of communal laundries and cooking kitchens—would any expense be involved. Indeed, when coal-fires have gone and the value of their successors has been realised, we shall wonder why habit and custom



THE SEMON CONVALESCENTS' HOME.
(A sheltered spot with home in the background.)

have been allowed to enslave us so long, just as we are now amazed at our stupidity in laughing to scorn the author of the Daylight Saving Act, to which experience has given universal approval. It is estimated that half the smoke in Bradford comes from domestic chimneys, and if these centralised sources can be secured, a great step will have been taken to purify the air we breathe twenty-four hours a day, and let in the priceless gift of sunshine, which is as essential to good spirits as to good health.

An exceedingly useful step towards getting the people of Bradford into purer air and better conditions would be the adoption of a universal penny tram fare from the centre of the city to each of its boundaries. Even if this desirable simplification in working the system, and the increased amount of long-distance traffic, did not actually make up for the smaller fare, the reduced revenue would be more than compensated for by the higher standard of public health that would inevitably follow. One of the forms of retribution that is borne by the community for allowing its citizens to exist in areas, and under conditions, that foster disability and disease, is the maintenance of large and costly sanatoria, hospitals, etc. Sickness, disease and crime are public as well as private liabilities, increasing in proportion as they are neglected, and the most mercenary considerations compel even the meanest citizens to consent to the spending of rates and taxes to keep them in check. On the other hand,

health, education and character are real communal assets that it pays to cultivate and develop, and a far-seeing and high-minded community would, under any circumstances, gladly devote its time, ability and means to the redeeming task of converting its human debits into human credits. There can be no doubt that the transference would lessen the demand on doctors, raise the level of the people's earnings through more regular attendance at work, mean less standing for machinery and more efficient service all round. That surely is true economy from every point of view, and if the public are to get the best out of the ten self-contained villages, they will give the most careful and painstaking consideration to such a proposal, and remember that physical health is one of the finest correctives for morbid minds.

When these proposals are considered in the light of what has already been done, their novelty is especially significant, and proves how much the public mind has altogether ignored the most elementary human needs. The growth of cities and the claims of industry have, however, enforced far greater co-operative effort than most people have yet realized, and, let us remember, it has never been found necessary to turn back. Formerly, people walked miles to and from their employment all the year round, with the result that life was very largely an animal existence of working, sleeping and eating—little wonder that imagination, outlook and ideals are so rare among the rank and file—then omnibuses came along,

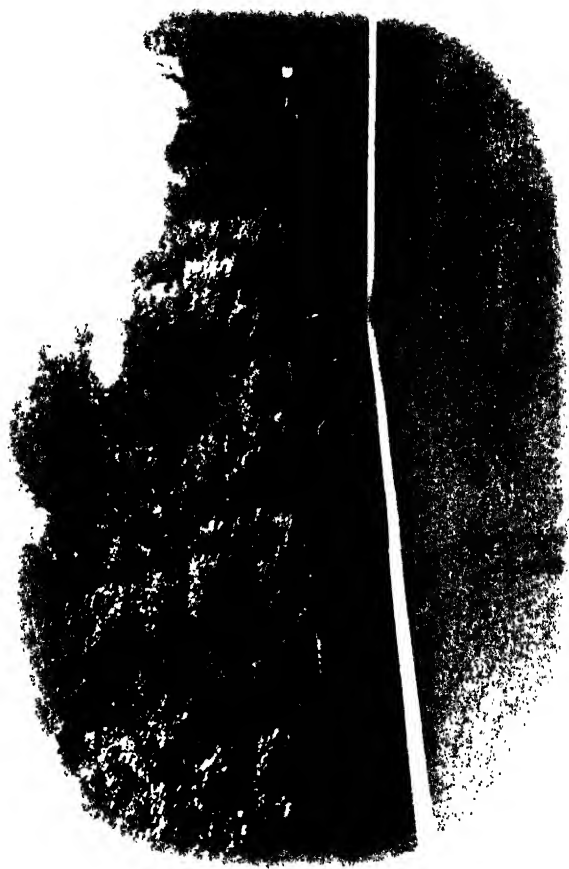


THE SEMON CONVALESCENTS' HOME. THE RETREAT

and ran with more or less regularity, except in very bad weather when people needed them most. These were followed by horse trams, usually owned by private companies, which ran short distances at long intervals for excessive fares; steam tram cars, came next, with their engines polluting the atmosphere and snorting through the main thoroughfares, and as these, too, were run, not for public convenience, but for private profit, the cars were clumsy and dirty, the conductors badly paid and without uniforms, and the fares out of all proportion to the length of the journey. Ultimately, local authorities began to see the folly of allowing dividend-hunting companies to monopolize the centre of the chief arteries of cities in order to secure maximum returns for minimum services, and so electric cars were put upon the rails by public bodies. This has resulted in something approximating to a continuous service, and running double the distance for the same fare; in normal times the cars are kept in good order and clean, the drivers and conductors well paid for reasonable hours, the public admirably served and a margin of profit remains. Were it not for the vested interests the tram lines would be used for the conveyance of goods at night, as well as for passengers during the day, thus relieving the busy streets of heavy traffic and public danger, and the ratepayers of the serious cost of maintaining them, while the expensive electric plant and tram rails could be used continuously, industry and commerce be facilitated, their

charges for carriage reduced, and the public revenue materially increased. That is a matter well worth attention in the light of reconstruction and the inevitable shortage of labour that must follow the war. What is true of trams is practically repeated in the history of gas, from candles and oil lamps onward, and in the record of water supply, from the days of private wells and polluted streams, up to the present. Indeed, the wider the survey of public services, the greater is the justification for extending them, and the more insistent the call for local authorities to be up and doing. If all this is true, private profit is not indispensable to material progress, and the sooner we cease to whet men's appetites with personal gain, and turn their minds to public service, the sooner will the greatest stumbling-block to human advancement be removed and God's Kingdom be established on earth. If we do not set out for this better way of choice, it is more than probable we shall be driven there by necessity, for the shortage of men will compel the most comprehensive and drastic re-organization of industry and commerce, from the handling of the raw material to the actual retailing of the finished article.

Having suggested ways and means for transferring the people from smoke-begrimed rows of monotonous and ill-adapted houses near the centre of the city, to the sunlit outskirts, and into homes specifically constructed to contribute to a life worth living, let us pursue the possibilities



THESEMON CONVALESCENTS' HOME, THE BOWLING GREEN.

that would lie at their feet. To build the houses and their appurtenances, and even to get the people into the homes, is not to complete the scheme, for the self-contained villages must have local pride, helpful neighbourliness and corporate life. To this great end, each of the ten communities would call into being a social service committee composed of the finest men and women within its borders, and these would seek to foster and express the best of which their constituents were capable. That inestimable boon would create a wholesome public opinion, a healthy rivalry and uplifting forms of communal enterprise, and give to these areas the saving grace of collective interest and altruistic service. With new methods for relieving the hardest-worked section of the community of unnecessary drudgery it may reasonably be hoped that the new homes would be kept becomingly clean, tidy and attractive, and that the children would receive correspondingly increased maternal care. Not only so, but the number of God-ordained citizens, whose mission is to keep the world young, sensitive and expectant, would grow, for a village without a reasonable number of children to make it resound with their merry laughter and innocent fun is a body without a soul, a community whose future is behind it. Indeed, it is a contradiction of terms to talk about a model village if its homes do not echo with that exuberant vivacity and overflowing gladness that testify not only to the presence of child life, but to the far more impor-

tant fact that they have come into a world that welcomes them with all the warmth and affection of loving parentage and honoured trust. In the meantime, the nation will begin to realize its indebtedness to motherhood and all that is involved in its endowment and uplift, and then the great day of new and better life will begin to dawn. The village school, impregnated with the congenial atmosphere, will gradually fill with fascinating little ones, and being staffed by teachers who have caught the fire and enthusiasm of these new-born communities, knowledge will be imparted and minds developed under ideal conditions such as will ensure for the education authority ample compensation, even from a financial point of view, for their capital outlay, in the form of steadily-rising grants. The winter would be thoughtfully anticipated by the social service committee, who would win from the golden opportunity all that enthusiasm, devotion and thoroughness could produce. Story-telling evenings for the children, helpful gatherings of mothers and meetings of fathers, would all find a place. Entertainments and concerts where local talent would be discovered, encouraged and developed; choral efforts by the village choir and string band; literary, scientific, social and other lectures would contribute to the wealth that ought always to be hoarded. The mutual improvement and debating society would set out to interest, instruct and enthuse the young men and maidens, and thus the wise use of spare time, and the faculty of

clothing ideas in words, would become unconscious but invaluable treasures. The library should be in charge of a man who knew exactly where to find the best book for every class of reader, and who could create a thirst for knowledge in those who had never even felt such a desire ; he would become an honoured member of the new community as his friendship extended and his helpful influence grew. When summer suns began to glow, prizes would be offered for the prettiest gardens, and the villages would be a blaze of colour, sweetness and perfume.

The allotment holders would be similarly encouraged to friendly rivalry, and patient application, increasing knowledge and intelligent care would find expression in the steadily-rising standard of the quality and quantity of their produce, for nature never fails to respond to those who respect and treat her with generous good will. The recreation ground would be the scene of refreshing animation, from the children's portion with its swings, see-saws and games, to the cricket crease and football enclosure, where dour battles were being lost and won amid excitement, enthusiasm and rejoicing. Through it all the initiating, organizing and controlling hand of the social service committee would be seen winning for the little community—not by coercion, but by opportunity and inducement—the very best of which its citizens were capable. But the enterprise of these stirring centres would not be confined within each border : village neighbourliness would

be fostered ; inter-village relationships and service would be encouraged in every direction ; each would vie with the other for pride of place, and make tremendous efforts to secure the prizes offered by the Lord Mayor, and the lesser honours gladly bestowed by the local representatives on the City Council, for the prettiest village, the most beautiful garden, the finest allotment, the winning team, the best choir, etc. These are not the word-pictures of optimistic idealism. There is no lack of aspiration in men and women ; all that is needed is to discover, develop, and focus them, just as the things that degrade and destroy are scientifically organized and scattered broadcast in the very soil it is your duty and mine to cultivate and save.

But when the physical and mental needs of these fascinating places have been met the scheme is not complete. Man is a spiritual being, and, unless he can be brought and kept in direct contact with God, he is a ship without a rudder. Material transformations of the most drastic and far-reaching description are indispensable, but only as means to ends, and never as ends in themselves ; the *open sesame* to the millennium is personal character, and whatever contributes to the building of that is sacred as prayer. Here, surely, is a magnificent opportunity for the Churches to give practical expression to that unity and brotherhood which the new era demands : over-lapping and waste would be unforgivable, but the application of the Christian



SEMON CONVALESCENTS' HOME - A QUIET CORNER.

ethic, through the medium of the Christian spirit, would win from these new villages, adherents, loyalty and service, that would leaven the little communities and lead them to reach out to better things. To-day the world is studded with men who are devoting themselves to the attainment of what other men regard as impossible, and to-morrow it will be achieved. Why cannot men do for God what they are willing to do for themselves? Why is the heroism of life withheld from Him who gave the qualities of mind and heart which alone produce it? When Alexander said, "Let him who bears my name bear my nature," he only demanded what God has been pleading for from the beginning. Are the Churches going to fail Him in this hour of unprecedented crisis and peril? If they will undertake in His strength to spiritualize the mighty movements of reconstruction, the nation will be saved; for by the every-day common-sense application of Christian principles, men will gradually be lifted nearer to God, and His Kingdom be established among them.

In one criticism advanced against the scheme, it is suggested that the tenants would use their votes to reduce the rents below a reasonable figure. Such ingenious devices are so contrary to fact and experience that they only reflect upon those who voice them. Bradford has long provided such communal service as gas, water, electricity, trams, etc., and it would be interesting to know what section of the inhabitants has attempt-

ed, much less succeeded, in abusing its voting power to the detriment of the community as a whole, for if 12 to 14 per cent. of the householders would be capable of such a thing, why have the 100 per cent. who use the services named, not already exhibited some inclination in that direction, in view of the fact that their success would have been assured? The suggestion is intended to reflect upon the good sense, sound judgment and common honesty of democratic institutions, but the advantages conferred upon the City by its municipal departments, when compared with what might have been expected if these enterprises had been in the hands of private companies, are so incalculable, and the undertakings constitute such magnificent assets, that the lending public are willing to advance money to the Corporation on similar terms to those offered by the Government.

Taking the whole kingdom together, only a few days' war expenditure, out of a campaign that is now completing its fourth year, divides 300,000 poor houses and a mean standard of living from an equal number of dwellings that for fifty years would give to over one million tenants new outlook and vision, and to the nation a new conception of the value and possibilities of human life.

Given anything even approximating to such conditions as have been foreshadowed, a new and better Bradford would be assured. The substitution of collective interest and concern for the indifference of an ultra individualism, and the



GRASSINGTON SANATORIUM
(for early cases).

provision of wholesome surroundings and elevating inducements for repressive measures, would revolutionize the home life of the whole city. Natural pleasures and inspiring ideals would gradually destroy the artificial longing for what is mean, sordid and degrading, that leads to a loose morality and kills the best of which young people would otherwise be capable. This transformation, however, will not come automatically, but only by a definite, united and long-sustained effort on the part of every man and woman in Bradford who really longs for the dawn of a new and better day.

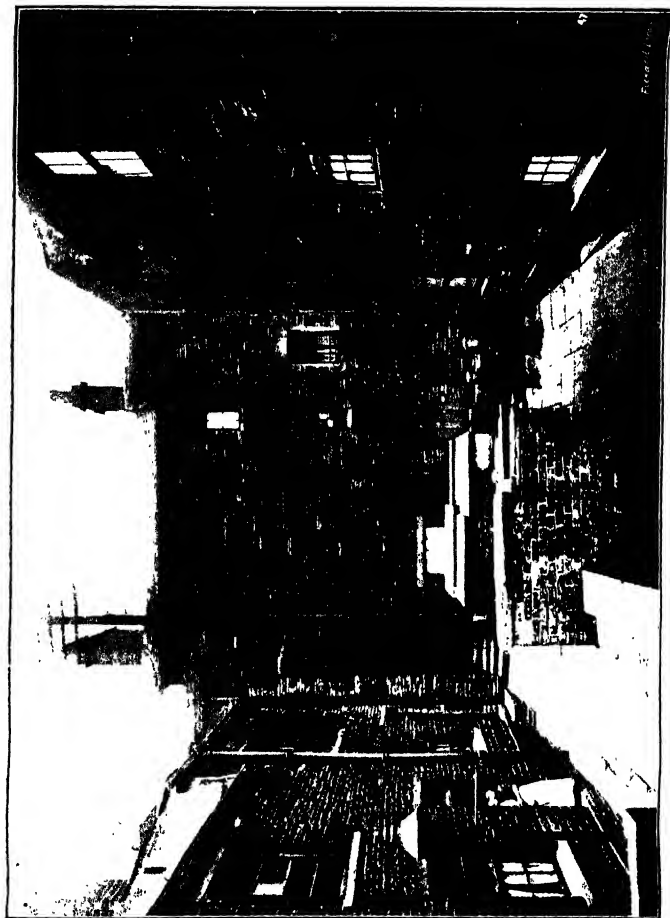
A community cannot suffer by doing right to its individual members, any more than parents by doing their duty to their children, for what after all should a city be but a great united and happy family in which each is concerned in the well-being of the whole?

Compared with an ideal community, the Bradford scheme of ten self-contained villages upon the hill-tops may seem puny, yet it constitutes a really practical and helpful step in the right direction, and if every reforming agency is willing to combine, and throw itself whole-heartedly into this unprecedented opportunity for blessing, faith can be reduced to practice, and our hovels and rookeries will be relegated to the limbo of incredible human errors—errors that have steadfastly defied the onward and upward march of men in Christian England, the richest country in the world.

Finally, in order to recognize to the fullest the

obligations laid upon us by the heroes who are daily risking their lives on land and sea for us and ours, we should crystallize our gratitude by giving these men the opportunity to become the first tenants of the new and better houses.

That would not only be giving tangible expression to our hero worship, but placing the dwellings at the service of those whose experience at the front had constituted an altogether excellent training for such a modified form of communal life. Comrades of the battlefield should make ideal neighbours, and their good fellowship and mutual regard would welcome a more permanent association in the peaceful years which we hope for after the war.



HOUSING SERMONS IN STONES.

CHAPTER V

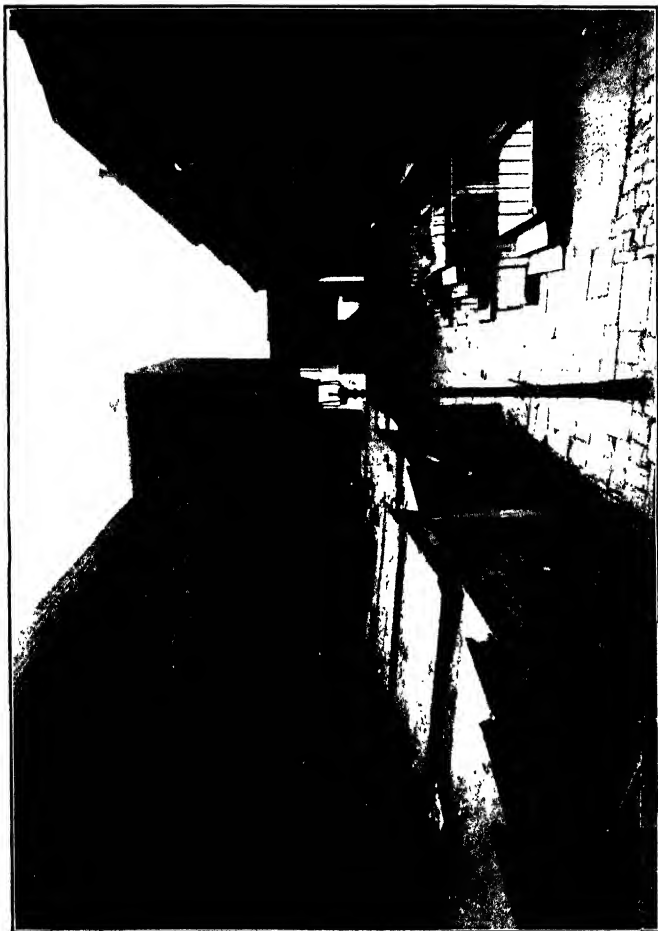
STANDARDS OF FAMILY LIFE

IN the great industrial centres in particular, and in working-class neighbourhoods generally, children are taken from school and sent to work far too early, with the result that they begin to earn money not before many of their parents need it, but long ere they themselves understand its value, or can possibly profit by its use. In numerous instances this experience promotes a precocious spirit of independence that tends to destroy filial regard and creates indifference to parental control, rapidly developing into disrespect and even defiance. The outcome is seen in street parades of towns and cities on Saturday and Sunday evenings, and in music halls, picture houses and similar places of amusement during the week. Girls in short frocks with hair hanging down their backs mix promiscuously with lads they have never seen before, and one need not dwell on the inevitable result of such loose relationships, nor wonder when these young people pass by institutions intended to promote their mental, moral and spiritual improvement with supercilious scorn. Under such circumstances it is not surprising to

find that, though these children reach years of maturity, they seldom arrive at those of discretion or become helpful members of society, contributing to the prosperity and well-being of the State. The girls are utterly undomesticated and therefore hopelessly unfitted to become wives and mothers, while the boys have no more conception of the responsibilities of husbands and fathers than they have of moral duties or of spiritual obligations. The excessive spending money they demand out of their wages goes as fast as they get it, and in ways which tend to convert liberty into licence, so that they all too frequently begin housekeeping only when confronted by a forced marriage or open disgrace.

Their second folly is made easy by the specious but damnable hire system, by means of which they furnish a house far too lavishly for a few shillings, on the invitation and promise to be found posted in the shop windows. "You get married and we will do the rest."

Their wearing apparel is bought from clothing clubs on the same pernicious principle, so that all they have belongs not to them but to their benevolent victimizers, and the demoralizing mill-stone of debt becomes a wellnigh insurmountable obstacle to the new life they have so culpably begun. By such means a considerable proportion of the man's aggregate earnings are mortgaged for years to come in the senseless belief that unforeseen circumstances can never arise, work will always be plentiful and health good. In the home, which is only hired



HOUSING "WHERE WEALTH ACCUMULATES AND MEN DECAY"

to them so long as the weekly payments are maintained, there is neither system, cleanliness nor comfort, for the girl, instead of becoming thoroughly domesticated, has spent her working hours in the factory or at some other money-earning occupation, and her spare time in the streets, so that she neither knows how to keep a home, cook a meal nor make a garment.

Eventually the bubble bursts, and the folly of such an ill-regulated life and wasted opportunities dawns upon the young people when it is too late. Employment fails or sickness creeps into the dwelling, and the mother must go back to her previous occupation in order to keep the wolves from the door. The child is put out to nurse and the home becomes a mere lodging-house to which the three resort at the end of the day.

When the wife returns tired after a hard day's work, every duty in the home is waiting for her, and a neglected and, therefore, often sickly child is needing the care that only a thoughtful mother can give. The husband, lacking the good sense and moral qualities indispensable to his office, begins to look for his pleasures outside, and turns to the public-house, the drinking club, the music hall, or the street, to find the attractions his home can no longer supply. Gradually the mother, unable to penetrate the gloom or see anything but one day of incessant drudgery and toil succeeding another, loses heart, gets sick of it all, begins to drift into indolent and dissipating habits, and before the new home has got fairly launched it

has become a wreck, and three lives—father, mother and an innocent and helpless child are at the mercy of the cruel storm of adverse circumstance till the public life-boat goes to the rescue and brings them on shore, minus self-respect and the capacity to make a new beginning on better lines.

These, with an indefinite number of variations, reflect the experiences of the so-called parents of an ever-increasing proportion of the children who are to inherit the great causes with which our history will forever be associated, and who are to become the trustees of generations yet unborn. They constitute sad and disquieting records of industrial blindness and parental folly, and unless we are prepared by putting an end to the half-time system and raising the school-leaving age of children, to prevent the home life of the nation drifting from its moorings, a low morality and self-destroying materialism will continue to develop, and prisons, workhouses, hospitals and asylums, the living monuments of neglected childhood, will be used to help us to ignore the handwriting upon the wall.

EVILS OF THE FACTORY SYSTEM

Familiarity and profit are wonderfully potent forces for promoting blindness to the obvious, and it may be taken for granted that nobody is so unconscious of the evils emanating from the factory system as those most intimately associated with it. It would be falsifying both facts and

experience to deny that so long as mill life is permitted to absorb mothers and young children, it must be a gravely disintegrating factor in the homes of the people concerned, and even more costly to an indifferent nation than, in the meantime, it is profitable to the industries concerned.

Girls who have left school for half-time employment at twelve years of age, or for full-time labour at fourteen, and have continued in the factory till they were married, cannot, in the natural order of things, be either reasonably domesticated or otherwise qualified for their new and supremely important duties of wife and mother; but as their work has been helpful both to their employers and their parents, the fact that it has prevented their equipment for the greatest purpose of life is entirely overlooked. If, however, they possessed every qualification, it would be a physical impossibility for them to work ten hours a day in the factory—which, including going to and from work and meal-times means twelve hours—and do their duty to themselves, their homes and their husbands. When, in addition, they are also mothers, the task is not only beyond the bounds of possibility, but as the family increases in number the work becomes slavery for them and cruelty for their little ones—who, winter and summer alike, must be dragged out of bed not later than six o'clock in the morning and taken to “nurse” by those to whom, as a rule, they are only a source of pecuniary profit.

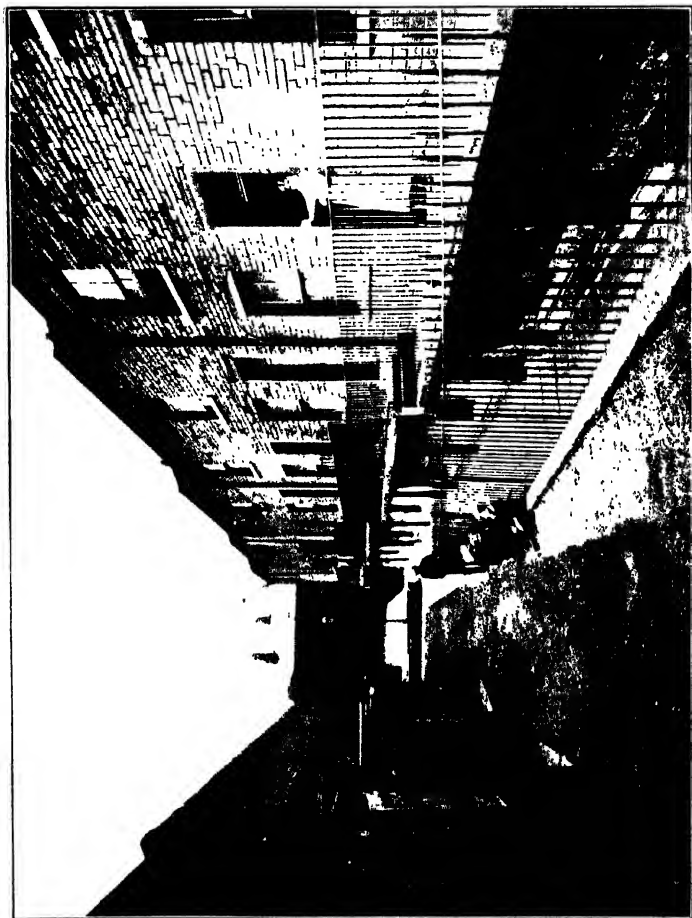
So long as mothers are obliged to work in the

mill in order to "*make both ends meet*" in the home, or wives have to choose between factory labour, with its limited hours, social conditions, and monetary advantages, and motherhood, with its exacting duties, added needs, and stationary income, so long will the birth-rate continue to fall and the country drift to a future when wealth will cease to be accumulated owing to the absence of new life.

It is only culpable thoughtlessness that leads us to believe that mothercraft always comes by instinct, and that any one in skirts can manage a home and do justice to its children. The most capable wife and mother, blessed with a good education, adequate means, a house conveniently adapted to domestic needs, and devoting the whole of her time to the hundred and one duties of her office, knows how far her best efforts fall short of the ideal she would fain realize. These are facts that people who would willingly convert every woman into a wage-earning machine would do well to ponder, for the time is coming when the nation must choose between mothers and money.

It is equally clear that so long as it is either necessary, or permitted to selfish employers and parents to convert children with frail bodies and only partially trained minds into fortune-making or family-supporting institutions, these children must be subject to influences which are fatal to a wholesome and intelligent maturity.

The wealth-producing possibilities inherent in the factory system blinded men to their opportu-



HOUSING. THE PLAYING-FIELDS OF ENGLAND.

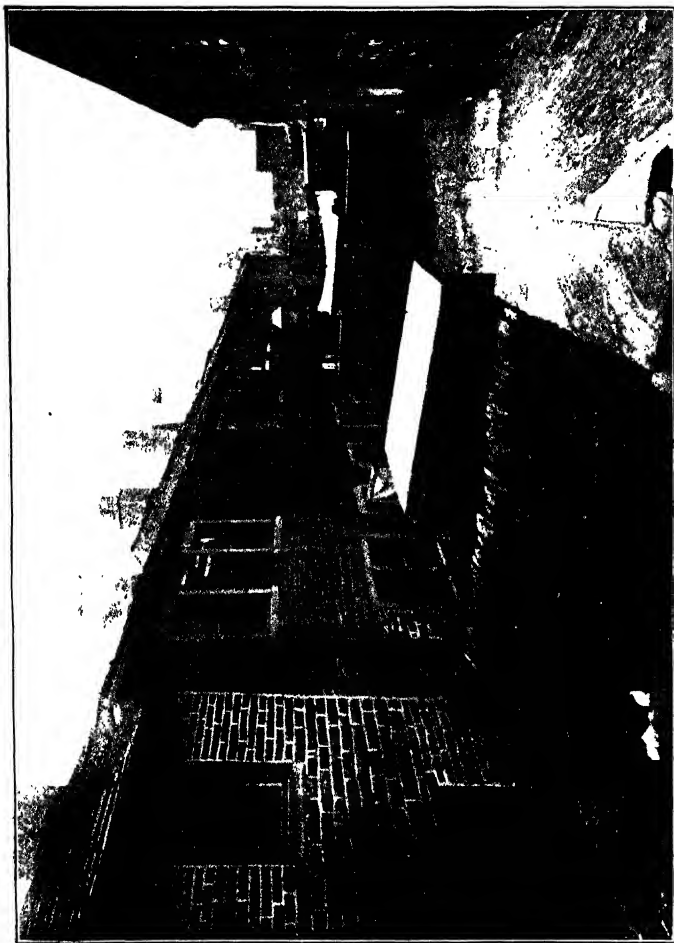
nities for service and to the fact that industrial reform and commercial prosperity run in harness. Consequently shorter hours, better conditions and higher wages to which a reasonable proportion of the large profits ought to have been applied were entirely neglected, if not ignored, except in so far as trades unions were strong enough to exact them.

It is here surely that commercialism breaks down, and if the moral and spiritual atmosphere has been vitiated and altruism and brotherhood have been driven into the background no one can wonder, for until we recognize and reward service instead of wealth, we shall continue to enslave both ourselves and our children, however successfully we may delude each other into believing that we are free men. The older captains of industry would say, of course, that these were the very conditions in which they were reared, and point to their own success as the best possible proof of the soundness of the system ; but though they were the type of supermen of their generation, and in no sense a fair sample of the bulk, their actions constitute the best possible answer to their words ; for they kept their own wives at home and their children at school, and thus deprived them both of the environment and experience they are so anxious other people should enjoy.

We forget that in the old days the textile industries were carried on in the home, where comb pots, spinning jennies, and handlooms

were part of the furniture of the house, and that consequently the children were always more or less subject to parental supervision and control. The introduction of steam power rendered domestic workshops obsolete, revolutionized the clothing trade, and helped to win for Britain the sobriquet of "The Workshop of the World"; but it not only eliminated the home influences of the earlier period, it actually introduced child slavery. Though philanthropists ultimately succeeded in somewhat humanizing the system, it still lowers, in far too many instances, the standards of purity and clean living by substituting promiscuous social intercourse among young people who are unable to protect themselves against the pitfalls of premature freedom.

In the factories of the city of Bradford, in normal times, more than 11,000 married women of child-bearing age—apart from widows—are at work. This means that there must be something approximating to that number of neglected homes, overworked wives, and as many partially forsaken and neglected children as are entitled to their mothers' care. This position is gravely detrimental to the infants who lose their protectors at the very time when most in need of the guardianship they alone can give, and are deprived of breast-milk when this is indispensable to their well-being. In 1911 an investigation was made in St. Helens, and it was found that the death-rate amongst infants artificially fed was five and a half times greater than amongst those fed at their mother's



HOUSING THE BULWARKS OF THE STATE.

breast. Experience has also proved that during epidemics of infantile diarrhoea in Birmingham, Liverpool and Bradford, the deaths of hand-fed infants have been from fifteen to twenty times greater than amongst those naturally fed.

Bradford is exhibiting most commendable enterprise in the promotion of child welfare and, as mill work has a gravely prejudicial effect upon the offspring of child-bearing women, it is felt that their precarious little lives are entitled to far more consideration from factory owners than has hitherto been extended to them. In an ideal State a wage-earning mother would be an anomaly, and one cannot help feeling that those who seek to justify the employment of married women in factories plead for the labour of to-day rather than the life of to-morrow. On March 31, 1915, the Health Committee passed the following resolution, which was confirmed by the City Council on April 13 :

That the Parliamentary Sub-Committee be recommended to include in the next Bill to be promoted in Parliament by the Corporation Clauses providing :

(1) That a married woman who is the mother of a child or children under the age of three years shall not be employed in any textile factory in the city unless the owner or occupier thereof makes arrangements to the satisfaction of the Corporation for the care of such children during the period of such employment.

(2) That the Corporation may make regulations with respect to such arrangements.

(3) For the conferring on the owner or occupier of a textile factory and the employee of a right of appeal to the Local Government Board against the decision of the Corporation in any case.

If industry is to come before child welfare—which at present it undoubtedly does—and deprive the infant of its mother, it is not unreasonable to ask industry to take care of the baby while the mother is taking care of industry. This can best be done by providing suitable accommodation—preferably on the factory premises—and putting it in charge of a qualified nurse with such assistance as circumstances may indicate, the Corporation supplying medical supervision free. As the breast secretion of milk inevitably fails when intervals of twelve hours intervene between one feed and another, such an arrangement, by enabling mothers to suckle their children during meal times, would ensure the continuity of that provision which nature intended for the major part of infancy.

It is exceedingly interesting to note that strictly as a war-time measure—for the firm rightly disapprove of the employment of married women under normal conditions—Messrs. Lever Bros., Ltd., of Port Sunlight, have opened a crèche on the lines foreshadowed in the powers which the Bradford Corporation intend to seek. Here mothers, taking the place of fathers absent on active service, can leave their little ones in charge of a competent matron and nurses with probationers in training. The experiment has proved an unqualified success.

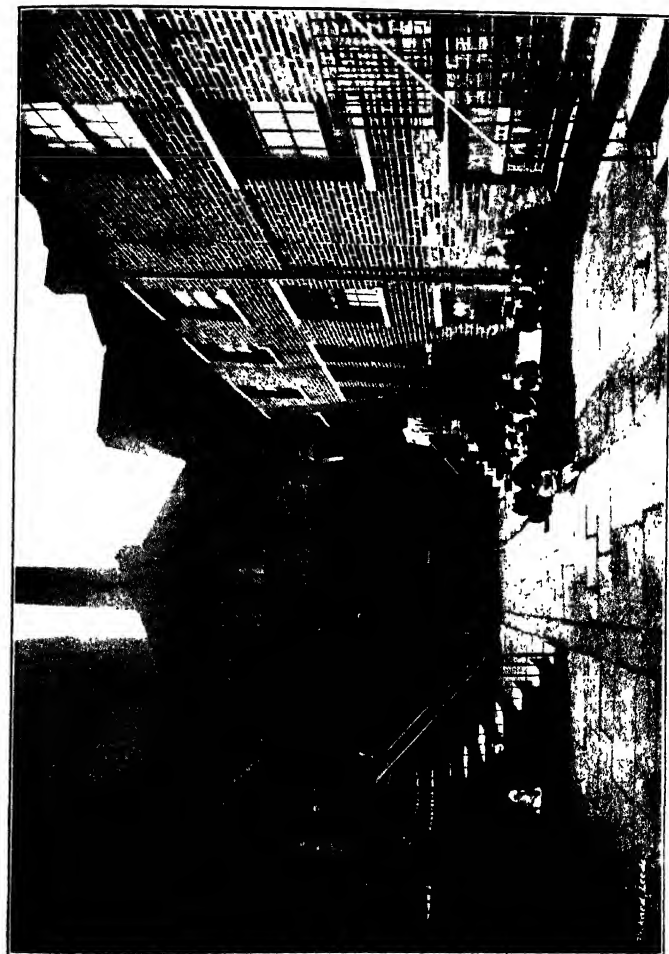
Child welfare schemes cannot, however, alter economic and industrial conditions. They must take these conditions as they are and mitigate

their unfortunate effects as may best lie in their power.

It ought not to be either necessary or possible for mothers with young children to go out to work in the richest country in the world. Why should married women who make our homes, sustain the nation's life, and feed industry with labour, be less adequately rewarded—indeed, as mothers they are not rewarded at all—than single ones, who would be the first to admit that they render no such supremely important service to the race? Yet the present industrial system makes it more profitable for a woman to work in a factory than to have children. Is it reasonable or just that motherhood should thus be penalized and impoverished by the community whose well-being depends upon it. If it is, and she succumbs to the same mercenary spirit, who is responsible for the falling birth-rate? Such a system stands self-condemned, for it sacrifices the future to the present and accumulates the wealth of to-day at the expense and to the detriment of the life of to-morrow. Its influence is apparent by comparison. In the South Wales coalfield of Rhondda, the chemical and glass centre of St. Helens, and the iron town of Middlesbrough, three districts in which there is practically no employment for women, the birth-rate is nearly 75 per cent. higher than in the worsted areas of Bradford, Halifax, and Huddersfield, although the trade of these towns depends upon a steady stream of young life being maintained. When a child-

bearing mother is compelled to work in the factory, instead of ceasing her employment for not less than three months on either side of the child's birth, she usually works as close up to the confinement as possible and returns to her work a month after that trying ordeal has been passed. What can be said for a system that renders such exactions either necessary or possible, or for a nation that permits its population to be maintained at such a callous price? Clearly the inducements for such women to have children are not very obvious, neither is the fact strange that many of them decline to do so. Yet we contrive to act as though men were made for industry and not industry for men, till the mercenary atmosphere grips us like a vice, to the exclusion of humanitarian considerations and altruistic endeavour.

In addition to the 11,000 married women, there were before the war some 6,000 half-timers employed in the factories of Bradford at tremendous cost to their physical development and better education. Many of them, certainly the greater proportion, were being called upon to pay this price because without their earnings the family income was inadequate. Factory and Education Acts—together excellent in themselves—have impoverished parents by reducing the earnings of young children through their exclusion from employment during tender years, and, in the absence of some equivalent recompense, the diminished income has been tantamount to an



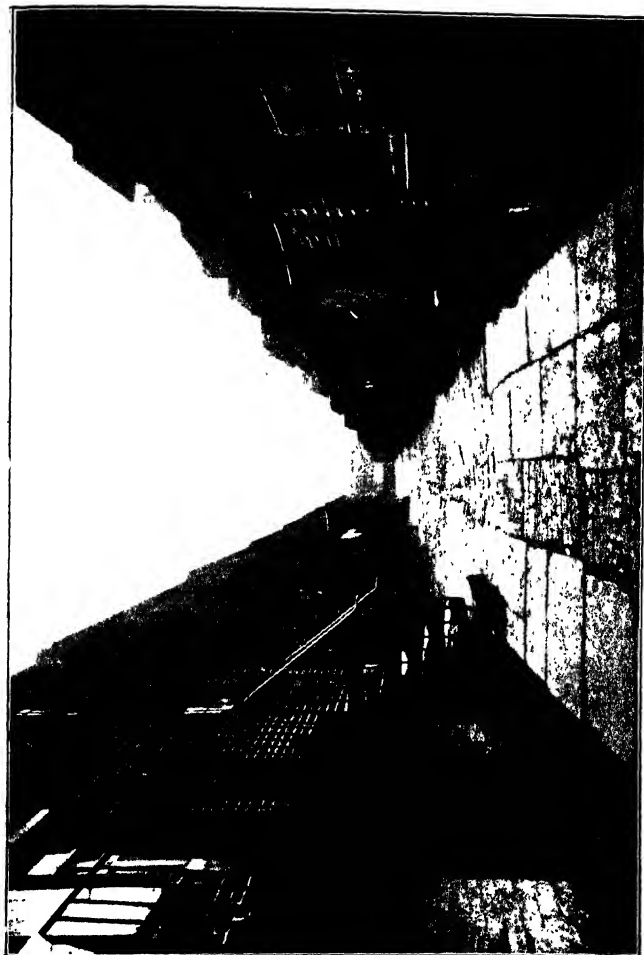
HOUSING 'OF SUCH IS THE KINGDOM OF HEAVEN

economic tax on family life. Instead of meeting the difficulties that, with benevolent intentions, it has created, the nation has confined itself to timid, fitful, and futile expedients ; in the meantime education has been gradually percolating through an increasing proportion of the community, giving imagination and vision which rightly demand a steadily rising standard of leisure and comfort. The maintenance of families on incomes that left their well-being entirely out of consideration became impossible, and so the decline in the birth-rate began where more popular education started, i.e. with the middle and upper working classes. Unless the fall is arrested it will continue to influence a progressively widening mass of the population, until it reaches and includes the base, for we are so blinded, even to our own private interests, that we continue to provide ambulances at the bottom of the cliff, rather than adopt the saner course of erecting a fence round the top.

Economy depends upon efficiency ; in public work we too often persuade ourselves that the best way to make money is not to spend it and in this way we waste both treasure and life.

The nation's much-vaunted industrial system has transferred a large proportion of the community from a natural, wholesome and healthy form of life to an artificial existence in which the indispensable factors to true progress are lamentably lacking. The great era of ultra-individualism, beguiled by positive evidences of material

profit, had consequently neither time nor inclination to turn to the negative testimony of human loss. The same short-sighted superficiality has dominated education. Men have put out their thinking as they put out their washing, to some one else, and become echoes rather than voices. Coupled to the pernicious influence which the factory exerts upon the receptive minds of children is a system of teaching which, if judged by results, appears to overlook the fact that "Education is an atmosphere, a discipline, a life." Knowledge is imparted which includes something of everything and not much of aught. Instruction is crammed in instead of native ability being drawn out. In this way superficiality and weakness are made to supply the need for thoroughness and strength, as though an attractive but flimsy superstructure could do duty for, or in some way dispense with, the solid foundations of character and conduct upon which alone the great purposes of being can be built. In the same way it seems to be understood that such fundamentally supreme and vital questions as "self-knowledge, self-reverence and self-control" are more or less outside the province of education, and so it fails to cultivate and develop those qualities in children which not only fortify them against evil, but enable them to become stalwarts for God. A premium is put upon precocity and boldness at the expense of natural and healthy growth, which results in an incredible number of children knowing far more about pernicious practices than their parents.



HOUSING WHERE THE CHURCHES OVERLAP

The seeds of evil once sown in prepared soil, throw out roots like the tentacles of an octopus, and are fed and watered by unseemly conversation, street parades and tainted amusements, producing in later years a harvest that expresses itself in rampant suggestiveness and low morality, which increase in intensity as the centres of great cities are reached. This lowered moral tone forms a basic part of the almost inextricable tangle of problems involved in the falling birth-rate, infant mortality, and the damage rate, and helps to constitute that vicious circle of menaces to child-life which can never be destroyed by playing with the effects instead of courageously abolishing the causes. Indeed, our namby-pamby ways of approaching reform not infrequently give a new lease of life to the very evils we set out to suppress, because in modifying them we appease the public opinion that would otherwise destroy them. Two suggestions naturally follow—First, that it cannot be less necessary to train older girls for domestic and maternal duties under a system of apprenticeship than it is to render a similar service to boys for the callings they are likely to pursue. Under such a system of apprenticeship a girl's time should be equally divided between her ordinary occupation and courses of training in a properly equipped school house, with competent staff, where she might carry out domestic duties, including the nursing of real babies and the care and supervision of older children. Second, that sex teaching to adolescent

children has become imperative, but if it is to do good and not harm it needs more than knowledge and the faculty to impart such knowledge ; it needs reverence that will create and maintain the atmosphere of purity. Many teachers possess the one who lack the other, and no greater misfortune could befall scholars than to come under the influence of strictly materialistic minds rather than under the spell of those whose lives evolve the love they give.

CHAPTER VI

RACIAL POISON

IT is impossible to leave the educational aspect of the problem of maternity and child welfare without referring to the terrible indictment embodied in the recent Report of the Royal Commission on Venereal Disease. This Report has not been taken sufficiently seriously by the public because our habit of turning a blind eye to such unsavoury subjects has persuaded us that they are scourges which are confined to the wicked Continent, and that the findings of the Commission as regards this country have been grossly exaggerated.

The fallaciousness of such conclusions is unfortunately well known to those most intimately associated with the awful and depressing experiences multiplying at child welfare centres as the war goes on, and which it is gravely to be feared will become endemic when it is over unless some energetic means of prevention are found. We must give up deluding ourselves and throw off that culpable indifference and superiority out of which perils grow. The fact that such a Report

is possible proves how miserably moral and spiritual education has been lacking.

How is the problem to be faced ? The Government has undertaken to spend a very large amount of public money in trying to eradicate, not illicit sexual intercourse, but the terrible results accruing from it ; and in order to induce guilty men and women to submit themselves for treatment, we are invited to give vice a semi-respectable appearance and look leniently upon crimes that threaten the race, impose martyrdom upon innocent women and condemn little children to torture and an early grave. The process looks very much like out-Germaning the Germans, who take no exception to licentiousness but object to the disorders associated with it. Let us do all we can by using every available means to modify and, where possible, stamp out these atrocious maladies, but do not let us put a premium on immorality by first dressing the wolf in sheep's clothing and then making the vicious habit easy and safe by offering to treat the criminals as though they were respectable citizens suffering from a justifiable disease. Who is to protect the nation against these outrages on society ? Has it no rights except the provision of free treatment for those who commit the outrages and the maintenance of the wreckage which their diabolical traffic throws on to human scrap-heaps ?

Why do we permit the pernicious seed to be sown in one place and the harvest to be stored in another, with the result that the sources of



HOUSING. 'HOME COMFORT IN EXCELSIS.

our horrors are not associated with their effects, and fresh creatures of God are continually being brought to the slaughter? It is evident that we have toyed with the monster as we have pandered to its inseparable and indispensable ally, drink, till we are afraid of them both, and must needs try to speak them fair, though they threaten the very existence of the State. We are playing with fire that can easily become a consuming conflagration¹; the alarming prevalence of the disease is the best possible proof that an inordinate number of people are already involved in the accursed habit, and the manner in which we are to deal with it will go far to determine whether our perils are to be proportionately increased, or the coming generations freed from what must otherwise prove their undoing. Clearly, if lewdness is to be whitewashed till it assumes the appearance of a plausible indulgence, and the medical aspect of the problem is to submerge the ethical, the reflex action upon the weak and vicious members of the community will be such as to open the floodgates of immorality. What will then become of maternity and child welfare? Have we stopped to think? Are we asking ourselves pertinent questions and trying to find answers to them before it is too late?

If one were to ask, what is the cause of venereal

¹ According to the monthly bulletin of the New York State Department of Health for April, 1918, 162.4 per 1,000 of the men in the new National Army are affected with this disease, as against 88.0 per 1,000 in the Regular U.S. Army under discipline during the period September to December, 1917.

disease, the answer would probably be that in the overwhelming number of cases it arises from sexual intercourse with infected persons, and in a minor degree from contagion, and many well-meaning people would not hesitate to protect the innocent by methods that would make it wellnigh impossible to reduce the number of the guilty, and would thus join hands with those who seek to bolster up and fortify the infernal traffic by any and every plausible excuse that human ingenuity can devise.

In ascertaining causes, however, it would be prudent to go very much further back and have regard to infinitely smaller beginnings. To say that an acorn when put into the ground is insignificant in size and appearance, but grows through storm and tempest until it becomes the monarch of the forest, would be to express the obvious ; but to apply the moral to venereal disease would be to incur the censure of worldly wisdom, which always regards such teaching as the work of cranks. Many people judge it soon enough to tackle an evil when it has sufficiently asserted itself to become a public nuisance and danger.

Yet it cannot be disputed that much of the evil originates in such mistakes as lack of parental control, liberty that is allowed to run to licence, indecent stories—often told by people who claim to be eminently respectable—suggestive posters and unwholesome plays that pander to and stimulate the animal passions which need exactly the opposite treatment ; and though the influence



HOUSING WHERE THE IMPERIAL RACE IS REARED.

emanating from these destructive forces—which are strangely ignored—may in the first instance be like a snowflake that would melt on your hand in a moment, a multiplicity of snowflakes both can and will create avalanches sweeping away villages and bringing ruin and devastation in their train. In the same way drink, that is almost invariably the decoy upon which the profligate depends, does not undermine will-power and self-respect all at once, but, like the spring that trickles out of the mountain's breast, it gathers as it goes until it becomes the roaring torrent. If immorality is to be held in check we shall have to go back to child training and education, to better homes, moral teaching, and a factory system that has regard to the well-being of the children employed under it. The man who loves his wife cannot allow himself to be responsible for venereal disease, neither can the woman who honours her husband, and it must be equally certain that celibates who revere the noble attributes with which God has endowed His children can never be guilty of dragging them in the mire.

This above all : to thine own self be true,
And it must follow, as the night the day,
Thou canst not then be false to any man.

Lord Sydenham of Combe, Chairman of the Royal Commission on Venereal Diseases, said :
“ Appalling as are the effects upon individuals who have contracted disease by contagion, I believe that the results of transmission are more

dangerous to the race, as they are certainly more insidious. Sterility, still births, and infant mortality are largely due to this cause. To them must be added large numbers of children who die young or who linger on under some great disability which prevents them from ever becoming useful citizens and relegates many to the care of the State at large expenditure. Thus not only is the birth-rate being lowered at a time when other causes are operating in the same direction, but the whole standard of public health is degraded and the vitality of the race is undermined."

The following figures were given to the Commission by Dr. Bishop Harman. In 150 known syphilitic families there were 1,001 pregnancies, 172 ending in miscarriages or still births, 229 infants dying in the first year, 390 children being alive but diseased, and only 210 alive and healthy; while in 150 apparently healthy families 826 pregnancies took place with only 78 miscarriages or still births, 94 infant deaths and 654 healthy children. Expressing the proportion per 1,000 pregnancies we get :

	Miscarriages and Still Births.	Infant Deaths.	Diseased Children.	Healthy Children.
Syphilitic Families .	172	229	390	210
Healthy ,,	94	114	—	792

Of the total number of blind children about 25 per cent. owe their blindness to gonorrhœa, 34 per cent. to syphilis, or 59 per cent. in all; of the children congenitally deaf, some 25 per cent. are the victims of syphilis, while of the aggregate



HOUSING, WATCHMAN—WHAT OF THE NIGHT?

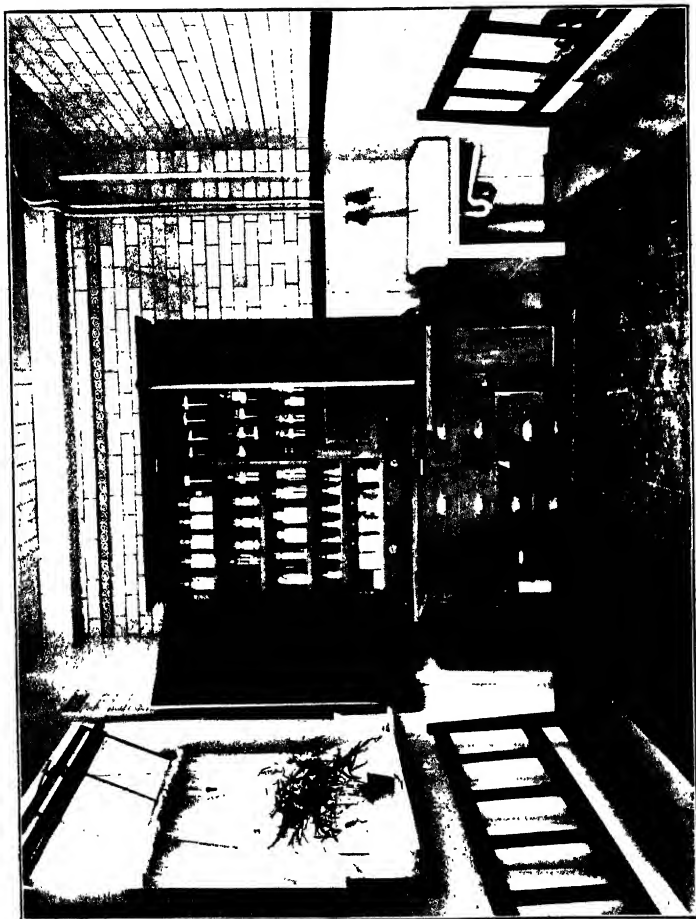
imbecile children about 60 per cent. owe their mental condition to this disease. These terrible and disgraceful examples, which could be multiplied indefinitely, give some slight indication of the complex and deep-seated character of the problems with which maternity and child welfare workers are called upon to deal, and they prove how gravely immorality threatens to riddle the race with loathsome disease.

It is difficult to appreciate the objection of the Commissioners to compulsory notification, which seems to be founded on a false sentiment which in practice treats the guilty as though they were innocent and the innocent as though they were guilty.¹ Surely a beginning could be made by confining compulsory notification to congenital syphilis, which would do something to protect the victims and the race without needlessly involving the culprits, who have already received far more consideration than those they have cursed. The retribution these diseases impose upon innocent women, their helpless offspring, and the State, should make those responsible for them shudder at their iniquities. The least of the penalties these inflict is a wretched army composed of women dragging through life, broken and miserable, infants cursed before they have seen the light by premature or precarious births and congenital debility, and mentally defective children wending

¹ In this connection it is interesting to note that in twenty-six States in America syphilis and gonorrhœa are notifiable diseases, and that in some of our own colonies the same common-sense course has been adopted.

their hopeless way to the prisons, workhouses and asylums of the State.

Clearly we are working on the wrong side of the river, and instead of spending our money and strength in dragging men, women and children out of the turbulent waters, we must cross over on to the other bank and try to prevent them falling in. Though the race is being ground between the upper and nether millstones of declining births and needless deaths, neither organized religion, the representatives of industry, nor Parliament itself have stopped to think seriously of the future or to inquire, " Watchman, what of the night ? " Venereal clinics may do something to limit the spread of infection, and it is to be hoped that when the war is over the military authorities will decline to discharge a single man who is suffering from disease until he is free from it. Legal barriers—which cannot be defended so long as they discriminate between men and women—may, if made equitable, help to suppress the more blatant forms of corruption, but neither can ever eradicate the cause, for morality is not the product of either drugs or statutes, but the atmosphere of purity and strength in which uncleanness of thought, word, or deed slinks into the recesses of oblivion. Thoughtful men and women can render no higher service to the State than by promoting with ceaseless vigilance the chastity of its people, for such national foundations are as indestructible as those of licentiousness are destined to decay.



MATERNITY HOME WAITING ROOM, ANTE-NATAL CLINIC.

But however base may be the sin wrought upon innocent mothers and children the need for modifying, as far as may be, the suffering that follows is unanswerable. This, however, involves the provision of scientific equipment and medical skill, not only at special clinics in general hospitals, but also at centres where mothers and children are in the habit of going for totally different purposes. The friendly and intimate relations existing between the doctors and those accustomed to seek their advice and assistance at maternity and child-welfare centres obviously render the unsavoury and disagreeable task less irksome. Again, many thoroughly respectable women who suffer from these diseases are ignorant of the fact and continue to infect others through want of knowledge. If they were urged to go to a general infirmary to be treated by strangers—however estimable these may be—the request would rarely be complied with, and the obnoxious menace would go on unchecked. Consequently, all high-minded citizens who are more concerned about minimizing the evil effects than about the particular channel or department through which that desirable result is achieved, will welcome any and every legitimate effort that seeks to destroy this awful enemy within the gates. In Bradford, specialists are employed to deal with venereal diseases at each one of the maternity and child-welfare centres of the Corporation.

Meantime, it will be apparent : (I) That however admirably maternity and child-welfare schemes

may be carried out, they cannot destroy the causes from which their problems spring, and that those engaged in them must suffer the discouragement involved in grappling with, and mitigating as far as may be, the terrible results they cannot control. (2) That though no limit can be imposed upon a declining birth-rate until it has actually been wiped out, there is a point below which infant mortality cannot go until the causes responsible for it have been removed. (3) That consequently such compensation for diminishing births as can be extracted from the falling death-rate is rapidly running its course as the latter approaches the limit imposed upon it by the bad stock and worse conditions from which a steadily rising proportion of children are coming. (4) That it will be much easier to allow the maternal instinct and love of infants with its inevitable sacrifice to die a natural death through sheer inanition than to try to resuscitate these when the need for new life has at last dawned upon us.

The citizens of to-morrow depend upon the outlook and vision of to-day.

CHAPTER VII

ENDOWMENT OF MOTHERHOOD

So pressing is the problem of child-life, and its importance so paramount, that it ought to be made unmistakably clear to the brave fighting fathers and the heroic working mothers that the needs of their children have not been ignored during the dark days of anxiety and bereavement.

If the State has any regard at all for its own progress and development, it will gladly concede the *right* of every mother to an endowment for every child, so long as she does her duty to it, just as it has long since acknowledged the justice and the wisdom of giving all its children a free education.

In this case, as in far too many others, we have adopted the usual English method of attacking the effect when we want to defeat the cause, for it is only the healthy child, blessed by good mothering, who is capable of reaping the full reward offered by a wise education. Nevertheless, it is to be hoped that the discredited theory of poverty will not be imported into the consideration of the endowment of motherhood, as though, forsooth, maternity only laid the nation under

obligation when it occurred in the ranks of those whose lives are led below the subsistence level. The war and conscription have shown that men of all classes belong to the State as well as to their parents ; therefore it is both just and right that the State, as well as their parents, should help to maintain children until they are able to support themselves. The shortage of men is notorious. The number of unfit recruits who have been passed into the Army, and the far more than one million men who have been rejected, and upon whom the nation is compelled to rely for the carrying on of essential industries, bear unanswerable testimony to the insufficiency of child-life on the one hand, and the discreditable superfluity of neglected "children of an older growth" on the other. In the light of these facts, none but an enemy would deny the State's responsibility to motherhood, or the folly of confining the inducement to the least fit, thus still further emphasizing the ominous tendency of this section of the community to supply an ever-increasing proportion of our future citizens. It is short-sighted policy while carrying out a great duty to suspect, with true Poor Law instinct, everybody to whom it should be rendered of having too high an income. It robs the recognition of every element of virtue and grace.

If maternity is indispensable to the State, and deserves encouragement, let the help—subject to reasonable safeguards—be given, so as to induce all married people to fulfil their obligation to



MATERNITY HOME. CONSULTING ROOM, ANTE-NATAL CLINIC.

the nation and the future by contributing a steadily increasing number of healthy children, capable of ensuring that

These things shall be ! a loftier race
Than e'er the world hath known shall rise,
With flame of freedom in their souls
And light of knowledge in their eyes.

The finest antidote to war and all its horrors is the coming, as God's messengers, of the mother and the child ; for by the very process you begin to create that purifying and ennobling atmosphere of love, out of which must come the spirit of universal brotherhood and goodwill, by means of which " swords shall be beaten into ploughshares, and spears into pruning hooks." It is, indeed, significant that the declining birth-rate of Europe, and the lowered ideal of motherhood during the last forty years have synchronized with the increasingly pleasure-loving character of its peoples, and it may be taken for granted that neither men nor nations can play fast and loose with this sacred office, without sooner or later paying the penalty.

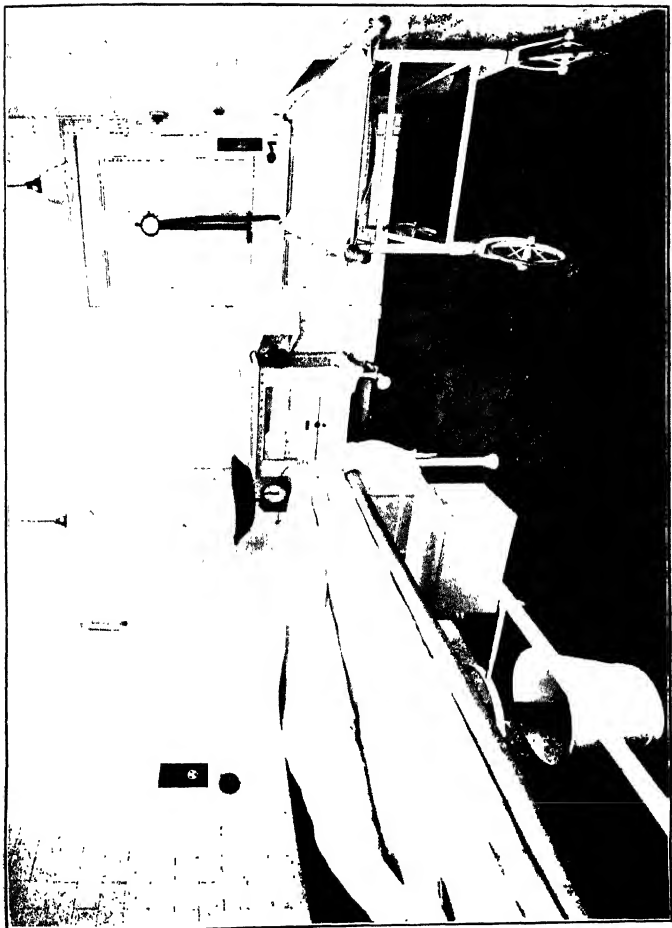
To care for the child is to save the nation.

By such prudent statesmanship the homes of the parents who have laid the world under a lasting obligation by enlarging its freedom and broadening its outlook, can be made worthy of the endearing name they bear, and life itself be endowed with clearer vision. Such a spirit would have a rare influence upon the women who are at last to enjoy their long deferred rights of citizenship, and it could not fail to lighten the unwarrantable burden

of those harassed and over-worked mothers upon whose incessant struggles the empire's future depends, while it would encourage the men who have so worthily defended us to bring back to the factory, the mine, the workshop and the store, the comradeship of the battlefield and the sea. In such a victorious atmosphere of consideration and goodwill a mighty leap forward becomes possible on the great highways of reconstruction. We begin to realize through actual experience the redemptive power of mutual respect and service portrayed in Macaulay's magnificent lay :

Then none was for a party ;
Then all were for the State ;
Then the great man helped the poor,
And the poor man loved the great.
Then lands were fairly portioned ;
Then spoils were fairly sold ;
The Romans were like brothers
In the great days of old.

Home life has been called " the bulwark of the State," and one of the most urgent duties of statesmanship is to emancipate and reward the women who make our homes, maintain our industries and perpetuate the race, but whose unassuming devotion to this most imperious duty has been so long overlooked, that its importance is neither understood nor appreciated. Unless some tangible and concrete recognition of the tremendous indebtedness of the State to motherhood can be given by means of endowment, we cannot hope to arrest the disastrous deterioration in the home



MATERNITY HOME. LABOUR ROOM FOR NORMAL CASES.
With Electric Incubator in corner.

life of the nation, a deterioration so largely due to our thoughtlessness and indifference.

In the reconstruction period after the war, some really potent influence for redeeming and strengthening parental capacity and pride is indispensable. The deadly diseases of luxury and egotism have infected the moral and spiritual forces of our people and led us to ignore the tendency of homes to become boarding-houses and of good mothering to wane.

If a system of endowment were adopted, the birth-rate would begin to rise, infant mortality to fall and the damage rate to be abolished.

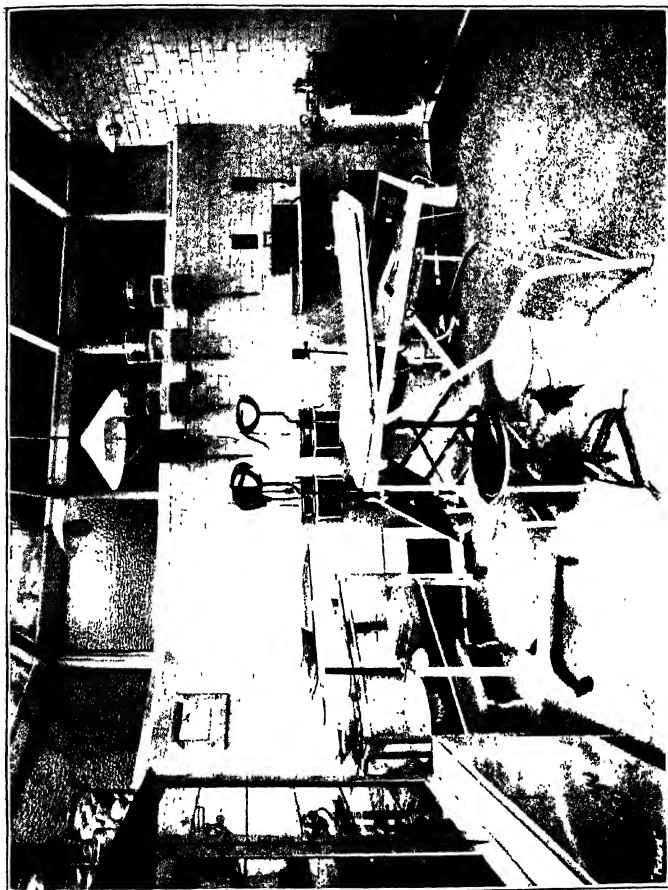
Every married mother should be given a national grant of 5s. per child, per week, until the child is able to earn its own living, subject to the three following conditions :

(1) That the house is suitable to meet the physical and moral needs of the family in size and convenience, a condition that would immediately cut at the root of the appalling problem of over-crowding and the loose morality that inevitably grows out of it ; (2) That the home is kept clean and healthy, so as (*a*) to abolish those dirty, unwholesome conditions from which sickness and disease inevitably spring, (*b*) to raise the standard of public health, and (*c*) to do away with the totally unnecessary demand for much of our costly hospital accommodation ; (3) That, on the evidence of a medical certificate, the children are being properly fed, clothed and cared for—which would go far to ensure the continuance of a race capable

of upholding and worthily extending the country's best traditions.

Such a national inducement to mothers could neither be construed into pauperism nor charity, for if the conditions were complied with—and without that the grant could not be earned—the State would not only receive a magnificent return for its money but the solution of the social problem would be brought much nearer than the most optimistic reformer can now hope for.

The gross cost would be heavy, for in normal times some 800,000 infants are born annually in England and Wales alone, but it would begin to work out a marvellous revolution in the health, education, character, homes and industries of the nation long before the high-water mark of expenditure had been reached. Assuming that every home into which a child is born earned the grant by complying with the three conditions, and allowing for a steadily rising birth-rate and a gradually falling death-rate in consequence of the more humane attitude of the State, it would probably involve an outlay of some £9,000,000 sterling for the first twelve months, and increase by that amount each succeeding year till it reached a maximum of, say, £120,000,000 per annum at the fourteenth year, after which it would remain more or less stationary at an annual cost of fifteen days' war expenditure, but with exactly the opposite result; for while the one is being expended for the specific purpose of taking life the other would be concerned only in saving it.



MATERNITY HOME OPERATING THEATRE

The economic results would be no less remarkable ; for the money would not leave the country, drop out of sight or be spent on drink. No one can take proper care of a child and make a profit out of *9d.* a day ; neither can that be done where there are more children for whom a similar amount is paid, for in that case they are growing older and needing correspondingly more money expended upon them. Consequently, the grant, like that for old-age pensions, would be used to secure better housing, better clothing and better food and thus become as much a stimulus to industry as to high-minded motherhood. Money makes money only when it is put into wise circulation, and it is safe to say that there is not a single desirable industry in the country that would not profit materially by such an outlay, safeguarded as it would be by the three conditions.

This is a feature of supreme importance to the commercial and financial interests involved, for long after the war we shall be poor and our customers poorer, and whatever tends to promote the home trade—always more desirable than foreign—will be of the utmost value, making the demand steadier and more reliable, and the calls upon labour correspondingly better. Some modification of the scheme would be necessary to meet the needs of the very deserving lower middle classes, which include many men engaged in the professions and kindred callings where there is a constant struggle to maintain appearances, rear and educate a family, and make both

ends meet. Safeguards would also have to be provided against physical, mental and moral unfitness, but these are matters rather of detail than of principle.

Children brought up under the new conditions would be fitted to profit by the education provided for them and instead of having an ever-increasing excess of school accommodation as at present, the places would be filled with boys and girls blessed by good mothering and earning for the education authorities larger grants for greater numbers, more regular attendance and increased efficiency. This efficiency would be rendered possible not only by better health, but by the freeing of the child from the unnatural necessity of early wage-earning. When such children had passed through the schools they would bring to the aid of industry those qualities of resource and adaptability which neglected ones can never supply but upon the provision of which much of our future commercial prosperity depends.

Incidentally the grant would prove a tremendous boon to that great army of deserving widowed women who have the misfortune to be left to bring up a family of young children without the father's earnings or anything beyond the Poor Law to compensate them for that irreparable loss.

In urging the endowment of motherhood, it is not sought to encourage large families—which, in working-class homes in particular, involve the slavery of mothers—but an indefinite number



MATERNITY HOME CORNER OF A WARD.

of moderate ones throughout the community, in the highest interests of married life and national well-being. While it is true that parents are primarily responsible for the care and upbringing of their own children, it is no less certain that the State is enriched or impoverished by the way in which that duty is discharged or neglected. Self-preservation alone would seem to impose upon the nation the twofold obligation of seeing that all parents have reasonable opportunities for fulfilling that duty, and that those responsible for its neglect should be punished ; but until the endowment of motherhood or its equivalent (which in America has returned the institutional child to its parent) has been established, the nation is not justified in assuming supervision of the home. In most cases that oversight would be merely nominal, for the three conditions—abolition of overcrowding, reasonable cleanliness in the house and the proper care of the child—would be readily complied with ; but where culpable neglect and all the terrible evils that flow from it are most rife, the fact that the grant would not be paid unless it were actually earned would constitute that stimulus to better things which is so urgently needed. The purpose, therefore, of the endowment is not to destroy but to repair and strengthen the homes of the people by removing the economic strain which families impose.

While the moral aspect is important in well-to-do sections of the community, the root cause

influencing the great mass of the people is that, in proportion as parents enrich the nation with new life and in so doing assume responsibilities spreading over many years, they impoverish themselves. . The theory of a family wage is a pure fallacy. Remuneration is paid not for the domestic liabilities a man assumes, but for the service he renders to his employers, so that three men doing exactly similar work get identical pay, though one, being single, has only himself to keep ; another, being married, but having no family, has two people to house, feed, clothe and care for, while the third, with half-a-dozen children is called upon to render corresponding duties to eight. This anomaly arises because the State has hitherto declined to recognize any obligations towards those who provide it with children. The time has now surely come when this injustice should be removed and family life be made economically desirable, instead of being penalized as at present.

How could such a fund be raised ? It would be well to remind anxious inquirers that the money would only be *circulated, not destroyed*, and would bring to the distributing and producing trades entirely new demands, creating in its circuit additional employment, profit and wages. Still there would be a considerable direct additional expenditure until the supremely urgent necessity for preventing the manufacture of the unfit which would most certainly grow out of it; had overtaken the costly and largely futile outlay on

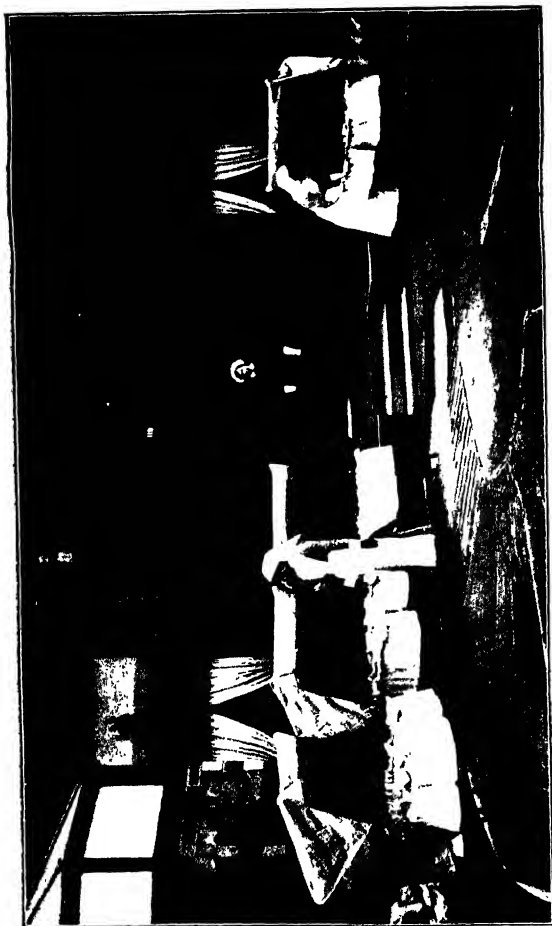
coercive cure. One of the most just and equitable ways of raising the money would be to tax single men and childless married couples—up to a point which did not involve hardship—for both enjoy the advantages which child-life confers on the nation. This and the grant would discourage celibacy, late marriages and childless unions, and should materially increase the interest of those whose selfishness has blinded them to the well-being of the children and the State. The balance could then be taken out of the income tax as a just recognition of our indebtedness to motherhood, the obligation of industry to labour and the necessity for a national insurance of the country's future.

There are hard-headed business men who would dismiss such a proposal without further consideration on account of its cost, but even they would do well to examine some of the economic factors. Our industrial and commercial enterprises rest not upon the security of buildings, plants, steamships and the money and credit associated with them, but upon the human factor of unborn babies, without whom neither the producing, distributing nor consuming public can continue to exist, and in whose absence factories and workshops, however efficiently equipped and managed, would be but so many white elephants. We assume that municipalities borrow money on the security of rates and the public property behind them, but clearer thinking will convince us that these are only the tangible evidences of the people who

produce them, and who in reality are the actual security, for rates depend upon ratepayers, and such collateral security as town halls, trams, parks, etc., derive their value strictly and alone from the public they exist to serve, a value that rises or falls in proportion to the number of people who need and use them.

This generation is bearing the burden of debt accumulated by our predecessors in years long past; some portion of the colossal borrowings now being piled up will have to be handed on to our descendants, and it is only because the investing public have taken it for granted that the Government will be able to redeem its loans as they fall due, that thousands of millions of pounds sterling have been subscribed to carry on the war. That security, however, is entirely dependent upon unborn babies, and if these fail it is surely obvious that the fabric of our activities must come to grief, however great may be the victory of the Allies over the Central Powers.

Consequently, from the standpoint of finance alone—apart altogether from human considerations—the industrial and commercial world, municipal enterprise and Government credit rest upon unborn babies. If a steady contribution of healthy, intelligent and happy children is not forthcoming, no combination of material factors, however strong, can save us from disaster. In considering such facts the sum of money involved in the endowment of motherhood is a negligible quantity and our sense of proportion should prevent our



MATERNITY HOME. OPEN AIR TREATMENT.
(For the Infants.)

sacrificing the mountain of national and local activities in endeavouring to save the molehill of cost. Many people, of course, seem to think the only true test of efficiency is to be found in the mortality tables, not in the improved fitness of those who survive, but no thoughtful citizen can be guilty of such folly, and our appeal is to them.

Less money would be required to lift child-life out of the conditions in which it must continue to perish than is spent on drink, the appalling incubus of which every country in the world seems more anxious to be rid of than ourselves. The factory and educational aspects of maternity and child welfare are obviously dependent upon endowment, for obligation to work in the mill can only be removed by such a grant. Consequently until the State adopts an entirely new standard of values it will keep on driving the mother from home and the child from school to supplement the father's earnings by wages earned in the factory.

Endowment should be accompanied by free ante-natal supervision attendance on confinement and after-care for both mother and child. Until such time as a State Public Health Department is created, the scheme could be carried out by the Local Government Board, through the health authorities of the Kingdom.

These authorities would be responsible for seeing that the conditions of the endowment were complied with and the suggested medical

and nursing assistance provided. The cost would probably be best met by transferring the maternity benefit at present administered under the National Insurance Act to the Local Government Board, and increasing the amount to a uniform £5. Of this money £2 could go to the local authority for the work done under the scheme, and would probably cover the cost, and £3 to the married mother—30s. one month before the confinement and 30s. when that important event took place, to help to meet the extra expense inseparably associated with the lying-in—after which the national grant of 5s. per week—subject to the three conditions—would follow until the child was able to earn its own living. To that rule there would necessarily be many exceptions, but these constitute details that need not interfere with the general proposals.

Local authorities would provide trained midwives and an efficient maternity home in each area with a thoroughly qualified medical and nursing staff. The employment of competent and controlled midwives, with a full nursing certificate, and an immediate call upon specialized services whenever such become necessary would, incidentally, secure employment for really capable women now squeezed out of the profession by antiquated midwives who ought no longer to be allowed to practise.

These more highly trained nurses would soon win the confidence of expectant mothers and secure, indirectly, the voluntary early notification



MATERNITY NURSES' HOME. DINING-ROOM.

of pregnancy—compulsory notification is neither desirable nor practical—which alone will enable real ante-natal supervision to be undertaken. What that would eventually mean for mothers and children only those associated with the work and familiar with the perils of neglect, can estimate. Its effect on the mortality and damage rates would be enormous and its influence in modifying the effects of venereal diseases infinitely more beneficial than anything that has yet been suggested.

The urgent duty of trying to rescue this generation of children and to prevent those of the next being born only to die or lead miserable lives is unanswerable. Once thoroughly ante-natal supervision were general, confinement would gradually become the normal function which Nature intended it to be, and after-care would complete that part of the recognition by the State of its obligation to motherhood and the child-life upon which its existence hangs.

Voluntary workers enjoy the proud distinction of being the pioneers in the great cause of maternity and child welfare, and are justly entitled to all the credit that belongs to those who have broken difficult ground.

But in towns and cities, at any rate, the problem must either outgrow the best of which voluntaryism is capable, or fail.

Finer spirits rejoice when the more generous outlook so far grips the community that it becomes willing to carry the standard of reform and recon-

struction to higher altitudes than voluntary effort is able to reach, and alternatively regret when the loftier vision fails to fire public imagination sufficiently to induce it to shoulder the sacred cause.

In view of the magnitude and urgency of the issues involved and the stress that is certain to follow the war, voluntary workers will be well advised to do all in their power to induce local authorities to assume full responsibility for the work.

One of the first drawbacks to voluntary work is that it imposes upon the benevolent and allows the other members of the community, who are equally responsible, to go free. No truly national responsibility should be left to or discharged by the benevolent alone. Under a purely voluntary system, the greater proportion of the well-to-do contribute nothing, whereas if these burdens were borne through the rates and taxes, the cost of the work would be equally distributed among those whose collective responsibility cannot be denied. It would often seem that if the voluntary policy had been adopted to perpetuate instead of to remove the gross injustices involved in neglect, it could not have been better devised, while to leave vital issues to precarious, however well-meaning, voluntary effort, when other nations are adopting radical and far-reaching measures for their solution, is equivalent to digging our own graves.

A long overdue protest should here be made

against the unwarrantable assumption that in some way or another, never explained, municipal service lacks "the human touch" which voluntary effort claims. The writer is a voluntary worker who for some years has devoted *the whole* of his time to promoting the public health of Bradford, but he would be ashamed to claim that for that reason his work is of a higher order than that done by the respective staffs at the Municipal Maternity and Child Welfare Centres, the Sanatoria, the Fever Hospital, the Convalescent Home, and similar public institutions for which the Health Committee of the Corporation is responsible. On the contrary, his experience compels him to record that he has never seen, in any form of service, public or private, or, indeed, in any home, a finer standard of enthusiasm, devotion, patience, and love than characterizes the daily round and common task of those who administer these municipal services which some would have us believe lack "the human touch," substituting hope for despair, and resolution where failure has destroyed effort. This is over and over again confirmed by the unsought testimony of those who, as patients, have received the practical sympathy and generous service which salaries can neither buy nor pay for. This untiring loyalty to those who need them forms the pride and glory of the medical and nursing professions, and they who magnify their own work by belittling that of others render an ill-service to the sacred cause of healing, meanly inferring the absence of "the

human touch" in institutions they have never seen and whose redeeming work it would be easier to envy than to surpass. Not what we have, but what we are ; not how much we possess, but how much of money or service we give in proportion to our means and opportunity, is the true standard of measurement for voluntary and paid workers alike. In Bradford it was the failure of high-minded and altogether excellent voluntary effort that compelled the municipality, either to take over the four "Babies' Welcomes," out of which our present scheme grew, or to see their doors closed. The efficiency of our equipment is not challenged, but whatever claim the city may have to distinction in maternity and child-welfare work, is neither to be found in its buildings nor their machinery, indispensable as both undoubtedly are, but in the magnificent personnel, the elevating atmosphere, and the fine spirit which pervades them all.

The tasks confronting us must not be prejudiced and impaired by internal dissensions ; the cause is ever greater than the human instruments by which it is to be won, and, in the meantime, there is urgent need and ample room for voluntary and paid workers alike. Said Nelson, on the eve of Trafalgar, to two officers not wholly congenial : "Yonder is the foe, shake hands."

If the war has taught us one lesson more than another, it is the folly of taking short views and the wisdom of looking ahead and preparing for the future. During the war, the Admiralty and



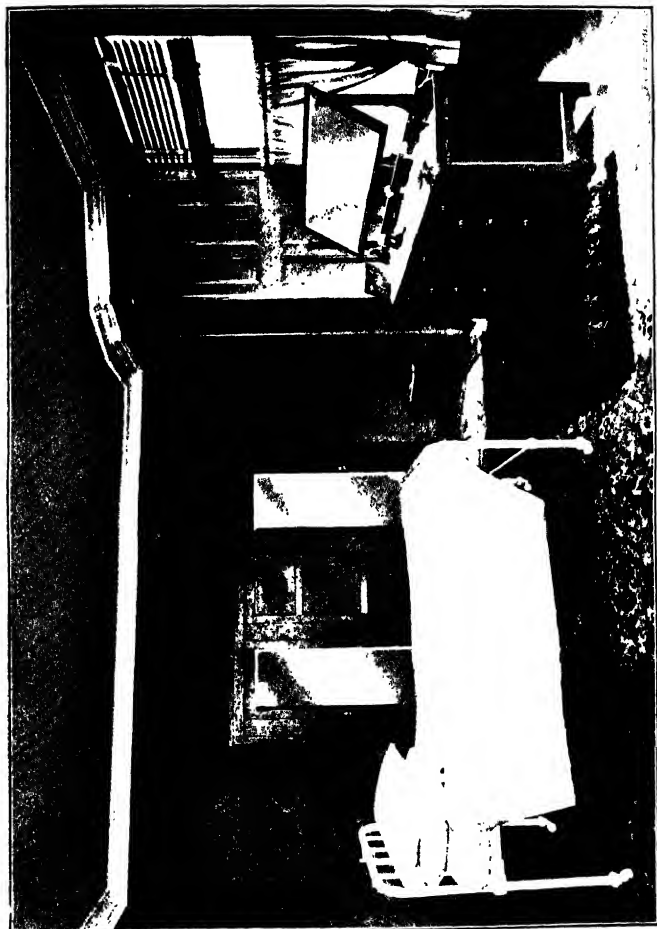
MATERNITY NURSES' HOME SITTING ROOM

War Office have been compelled to adopt drastic remedies to meet unprecedented difficulties. If such steps are necessary and justifiable to enable our enemy to destroy life abroad, is it unreasonable to urge that equally exceptional measures should be employed to preserve life at home? Surely the most hopeful method of doing so is to begin with the ante-natal child and follow that child step by step until it is thoroughly equipped with a healthy body and a sound mind. The money and skill unquestioningly contributed for the care of those who have been allowed to grow up without either of these advantages would go far to prevent the evils we so lavishly and ineffectively endeavour to cure. Perhaps one of the first requisites for successful municipal work for motherhood is to enable the individual mother to feel the dignity of giving life and the supreme importance to the race of the function nature has assigned to her. Instead of neglecting her and denying her the careful advice and help she needs to secure the health of her infant, she should be made to feel that her child, as a citizen, is to receive a civic welcome into the world. We want to create a spirit of family pride—establish the importance of motherhood ; we want every woman to have the means at her disposal which will prevent her from sinning against the community and help her to mould the lives of healthy, happy children in the world that is to be. It is a world that is to herald the recognition of the mother and her child, and to modify those glaring in-

equalities in social life and conditions which are destructive alike of infancy and of the ideals of Christian citizenship. There may be those who fear that, in some mysterious way, schemes of maternity and child welfare will tend to destroy character and conduct; there are not wanting critics who believe that a municipal service undermines parental responsibility.

On the contrary, such work has, in practice, been found to inculcate personal responsibility on the part of fathers and mothers through their pride in realizing that their children are the concern of the community. Our purpose is not to destroy home life or find a substitute for it, but by timely helpfulness to improve and strengthen it, and we have unmistakable proofs of the humanizing influence of our work.

Two interesting side-lights are thrown upon the French attitude to the problems of child-life. Early in 1917 the French Academy of medicine received, from a special Committee, a report drawn up by Professor Charles Richet on the depopulation of France. Professor Richet attached most weight to the actual cost of rearing a child; he estimates that in the working classes a child up to the age of fifteen years costs every year a sixth of the father's earning, and the main conclusion he urged the Academy to adopt was that the only remedy is for the State to make an equivalent contribution to the family budget, payable to the mother. It seems probable that a recommendation in this sense will be made.



MATERNITY NURSES' HOME BEDROOM.

It is equally interesting to learn that the Chamber of Commerce of Nancy began an experiment of a modified form of endowment on January 1, 1918. A subscription list was opened and a sum raised sufficient to enable £96 to be devoted to each child after the fourth in any family in the town or the Department in which Nancy is situated. The money is to be paid quarterly and covers thirteen annuities of unequal amounts as follows :

1st year	£6	8th year	£8
2nd „	£4	9th „	£8
3rd „	£4	10th „	£8
4th „	£4	11th „	£10
5th „	£6	12th „	£12
6th „	£6	13th „	£12
7th „	£8		

It is estimated that this division will meet, approximately, the needs of the child at varying ages. It is, however, quite tentative. Certain conditions regarding cleanliness, honesty and industry are attached, and the social position of the family is taken into account. The Chamber of Commerce does not claim that its scheme is perfect and expects that much will be learnt from experience and criticism. Such a scheme does, however, offer an opportunity to people without children, or with only very small families, to assist those with greater responsibilities, and certainly deserves serious consideration.

When shall we in Britain be wise enough to learn that the type of wife and mother who alone can save our country must not be sacrificed to

money-making, but should be consecrated to the highest duty in the land in order that she may give her life to the supremely patriotic duty of caring for her children and training them as noble men and pure women? Whatever interferes with that divine purpose, be it unjust laws, industrial systems, ignorance or deliberate sin, is not only inimical to the State but is a violation of the birth-right of the unborn.

Could the epoch of regeneration that is before us be used for a more humane purpose than that of turning our minds to the great and abiding realities of love and service, that we, and those who come after us, may cease to mar, and begin truly to enjoy, the rich and glorious inheritance our Maker has bequeathed to us?

We live in deeds, not years; in thoughts, not breaths; in feelings, not in figures on a dial. We should count time by heart-throbs; he most lives who thinks most, feels the noblest, acts the best.

CHAPTER VIII

A CLEAN MILK SUPPLY

MILK, the most valuable, the most nourishing and the most easily digested of all our foods, is undoubtedly also one of the most carelessly produced and indifferently handled.

Dairy-farming needs to be revolutionized and the production of milk should become a science—a policy as much in the interests of the farmer as of the consumer. At present, good, bad and indifferent dairying are treated alike and the system has the effect of penalizing the farmer who adopts improved methods and of putting a premium on the man who continues in the old ruts.

In order to bring this cheap and valuable food within reach of those who need it most, there must be a much more equitable distribution, at as reasonable a price as circumstances will permit, and a general raising of the chemical and hygienic standards of production.

Such reforms would immediately justify themselves, both in a vast improvement in the general public health and especially in a new outlook for the children of the future.

An enormous contribution to infantile mortality is directly attributable to contaminated milk, which not only kills the weak, but materially prejudices the strong. Five years after a high infantile death-rate, it is a notorious fact that school children are both smaller and lighter.

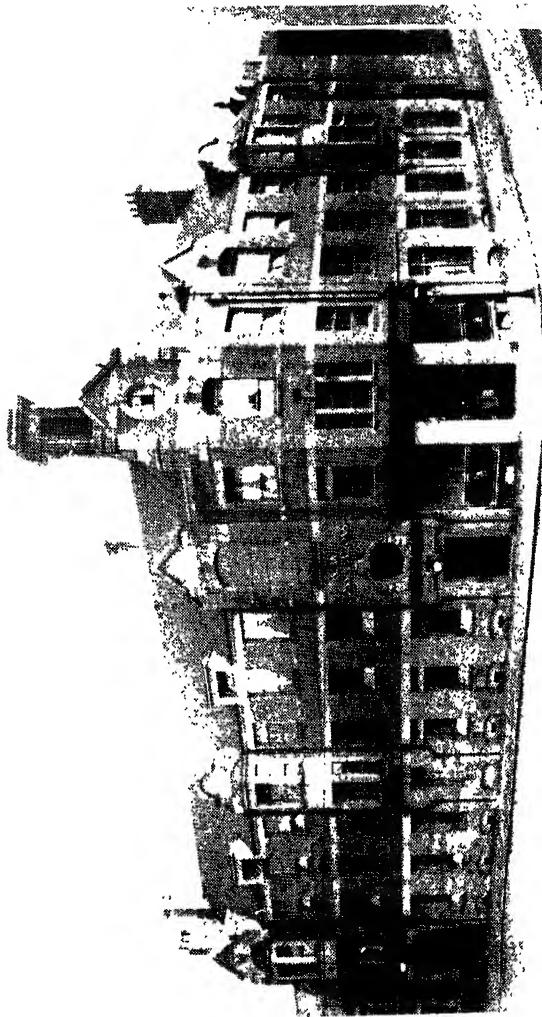
The overwhelming proportion—certainly not less than 80 per cent. and in the opinion of many authorities as high as 95 per cent.—of what is known as surgical tuberculosis, that is, tubercular bones, joints, glands, etc., spring directly from the milk of tubercular cattle. Here are the figures for Bradford since notification began :

	Notifications.	Deaths
1913 (from Feb. 1)	377	116
1914	208	86
1915	272	88
1916	314	131
1917	184	95

This means that for the five years 1913-17, on the 80 per cent. basis, there was an average of 216 children each year who either died or were crippled as the result of drinking contaminated milk from tuberculous cattle, and the deadly menace is still at work.

Milk is one of the most sensitive carriers of disease and, as such, clearly stands in a category of its own and must not be confused with other foods altogether outside of such risks.

Upon the possibilities of reforms in our milk supply it is better to have the opinion of an expert, and I am indebted to Mr. Wilfred Buckley,



INFANTS' DEPARTMENT. ELEVATION OF BUILDING.

Chairman of the National Clean Milk Society, for much of the information given in this chapter.

The majority of people in this country do not recognize the full value of milk as a food, nor does the average person realize its cheapness, since the nutritive value of a quart of milk is about the same as that of 15-16ths of a pound of lean beef or of 10 eggs. Unfortunately, milk is not only a food for human beings, but it is also a most excellent food for bacteria. If they were rabbits, there would be no difficulty in making the men who handle milk recognize their presence or their danger, but the great disadvantage to farmers and dairymen is that they are dealing with a commodity in which it is most difficult to see the actual contamination. As to the question of bacteria in milk, there is a great difference between the precautions adopted in this country and in the United States. Even the Health Authorities in most of our cities devote more attention to the chemical value of milk than to its hygienic value. They are concerned if cows do not give milk containing 3 per cent. of butter, but if the milkman milks with dirty, wet hands, nobody knows and practically nobody cares. In reality, the cleanliness of milk is of greater importance than its chemical composition. Bacteria increase very rapidly in milk: the increase depending largely upon the length of time that elapses between the time the milk is drawn and the time at which it is delivered to the customer, and on the temperature at which it is maintained.

There is a great pictorial advertisement published by the Board of Health of the city of Chicago called, "The long haul and the short haul." "Haul" is a railroad expression. The picture of the short haul is of a woman feeding the child from her own breast, which is, of course, by far the best way of doing it. That is nature's way—the short haul. Milk drawn from a healthy cow by a surgical operation or even by careful milkers frequently is free from bacteria, whilst the average London milk contains about 4,000,000 bacteria to the cubic centimetre—i.e., approximately to one teaspoonful.

Thus "the short haul" absolutely prevents contamination. "The long haul" begins at the cow-shed: the milk passes from the cows through contaminated air into a bucket, and is then conveyed into the milk room on the farm, where it may be well or ill handled. From there it goes to the railway station, where it is perhaps kept in a hot place before being put into the train. Then it goes to the big wholesale milk-shop where it is handled again, and then to the retail milk-shop. Thence it travels to the consumer, who probably stores it in an open jug, and later feeds it to the baby. In the United States "the long haul" often means forty-eight hours instead of the fraction of a second of "the short haul."

In tracing the course of milk from the cow to the consumer, one grows to realize that at every step there is grave danger of contamination. Take the cow to begin with. To put it mildly



INFANTS' DEPARTMENT, WAITING-ROOM.

Edward L. Smith

she is usually not very clean. She has been tied up all winter, at least during the nights, and has lain on her dung so that her flanks and perhaps her udder have become coated ; she is milked in a cow barn that is by no means hygienically clean. The milker may have been busy with other farmyard operations, and his hands and nails are probably dirty ; he very likely milks with a wet hand, a disgusting habit, which means that the milk washes the dirt from his hands into the pail ; the pail used is of so prehistoric a type that it may be called an Adam and Eve bucket with the largest possible opening apparently especially devised to catch any manure and dirt that falls from the cow's flanks or udder. The milk is allowed to stand in the cowshed whilst neighbouring cows are milked, with the possibility that filth may splash into the bucket, and with the certainty that contaminated air will affect the milk. It is then poured from the bucket over the rim that has rubbed against the milker's trousers into the churns, perhaps with no attempt at cooling it in the meanwhile ; these churns have perhaps not been any too well scoured.

The milk then leaves the farm for the tender mercies of the railway. Arrived at the station it may have to wait in the hot sun before being placed in the airless milk or baggage van. Frequently other articles, such as crates of fowls, are placed on the tops of the churns. When being unloaded from the train one may very often see the milk well up inside the neck of the churn over

the lid and then drain back again. The churn is then spun along by a porter who, one may be sure, has not recently washed his hands, and when the milk reaches the city dairy it is poured over that same rim that has been so frequently handled. At the dairy it passes through other hands and at last sets out on its final journey, too often in a little hand wagon in a highly polished churn. At the consumer's house the wagon draws up in the gutter, perhaps over an open drain, and the food for our children is then poured, in the dusty street, into delivery cans. Its troubles are by no means over when it reaches the customer's house, for there it often remains in an uncovered jug. At one of the best nursing homes in London the milk was put outside each room in the morning in a jug without a top to it, while the housemaid swept the stairs.

Contrast the proper way of dealing with milk !

The cow barn should be scrupulously clean and well ventilated. The cows should always have the long hair on their udders clipped short and they should be groomed before milking, their flanks and udders being washed and the udders wiped with a damp cloth. The men should wear overalls and milk with dry clean hands with short nails. The bucket should be sterilized before use and should be of the modern pattern used in America, with covered top and a hole 4 to 5 inches in diameter at the top of the side. Immediately a cow is milked the milk from that cow



"Richard, L. 1918"

should be taken from the milking barn to the milk room, where it should at once be cooled and run into sterile bottles, which should immediately be sealed. These bottles should be put in cases and transported to the railway refrigerated cars. The bottles should be delivered at the house of the customer who should only open them when the milk is to be consumed. If you go into the big hotels in the large cities of the United States and ask for milk you will always be given a bottle sealed on the farm with the name of the farm on the bottle. It is as strange there to have milk brought in a jug as it would be to have champagne brought in a bucket. We are a long way behind in this country. Nobody in particular is to blame, it is just lack of education all round. If anybody can be criticized it is the Health Authorities, but they cannot entirely be blamed, for they need public backing and the public has still to be educated.

To turn out clean milk a man must be more than a farmer at the present day. A farmer used to be a man who converted mangels, hay and straw into milk, and when the milk left the cow his duty ended. But now he has to be a chemist, a veterinary surgeon, a bacteriologist, and a number of other things besides and, therefore, he needs the co-operation of all concerned with the subject.

Dr. Park, head of the Board of Health in New York, calculates that the deaths in New York city of children under one year of age which

can be traced directly to tuberculosis in milk, probably number 300 per annum, whereas the number of deaths that occur from the contamination of milk by dirt certainly reaches thousands. Tuberculosis is a very serious question for the farmer, for it is only with the greatest difficulty that one can get rid of it in a herd. It means that the farmer must breed his own calves. To do that requires a great deal of pasture for bringing up young calves and stock, and one can make more money by keeping a larger number of cows and producing milk on that pasture. A herd free from tuberculosis costs money and the man who has such a herd should be paid more highly for the superior milk he sells. Give the farmer a chance and he will do what the public demands. The public are all wrong if they expect the farmer to be a philanthropist; he cannot be expected to go to all the expense that is necessary in order to get a herd free from tuberculosis unless he is well paid for it. It would not be a business proposition.

It is, of course, the ideal to get clean milk to the consumer in the condition in which it should leave a healthy cow, and, on the much-debated question of pasteurization, the great danger is that it does away with the care necessary to turn out really clean milk. In other words, pasteurization covers a multitude of sins and creates the idea that it will make dirty milk immune, but you cannot make a bad article good by means of pasteurization. The handling of milk is a difficult



INFANTS' DEPARTMENT, WEIGHING AND MEASURING

operation and it is an operation which, in this country, will be more helped by the education of the citizens than by their coercion. Much more might be done by inspection, provided that the inspector is a specialist and not, as in one instance, a road surveyor as well.

In the United States, dairymen are given a score card every few months on the back of which there are two sides, one devoted to "equipment" and the other to "methods." Each side is divided into from fifteen to twenty details which clearly set out what is necessary in order to handle milk in a proper way. In one column there is stated the full number of marks the milk inspector can give for each detail if it be perfect, and in another the number of marks awarded for the "equipment" and "method" on the farm under examination. For instance, the dairyman sees that he can have four marks for a bucket with a covered top and he says, "I will get that." The card tells him wherein he may be deficient in his plant or in his methods. The system was recommended by the United States Government years ago. The same score-card method is also applied to milkshops. If at a farmers' meeting one man says of another, "That's Jones of San Francisco—his dairy is sixty-eight," one knows what he means, for the number sixty-eight conveys to one's mind a definite idea. There is a bit of a sporting spirit in it too. If a man has been given fifty-six marks on one occasion by

RACE REGENERATION

COPY OF AMERICAN SCORE CARD

IN USE BY THE BRADFORD HEALTH COMMITTEE ON ALL DAIRY FARMS
WITHIN THE CITY AREA

(Front)

SANITARY INSPECTION OF DAIRY FARMS.

SCORE CARD.

Recommended by the Certified Milk Producers' Association and the National Clean Milk Society.

Occupier of Farm.....

Owner of Farm.....

P. O. address.....

Total number of cows.....Number in milk.....

Imperial gallons of milk produced daily.....

Product is sold to.....

Date of inspection.....191.....

REMARKS :.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(Signed).....

(Copyright.)

A CLEAN MILK SUPPLY

121

SCORE CARD (Back)

EQUIPMENT.	SCORE.		METHODS.	SCORE.	
	Per- fect.	Al- lowed.		Per- fect.	Al- lowed.
COWS.			COWS.		
Health.....	6	.....	Cleanliness of cows.....	8	.....
Apparently in good health.....			(Free from obvious dirt, 6.)		
If tested with tuberculin within			COWSHEDS.		
a year and no tuberculosis is			Cleanliness of cowsheds.....	7	.....
found, or if tested within six			Floor.....	2	
months and all reacting ani-			Walls.....	2	
mals removed.....	5		Roofs, rafters and ledges.....	1	
(If tested within a year and re-			Mangers and partitions.....	1	
acting animals are found and			Windows and artificial lights.....	2	
removed, 3.)			Stable air at milking time.....	4	
Food (clean and wholesome).....	1	.....	Freedom from dust.....	2	
Water (clean and fresh).....	1	.....	Freedom from odours.....	2	
COWSHED.			Cleanliness of bedding.....	1	
Location of cowshed.....	2	.....	Yards around cowshed.....	2	
Well drained.....	1		Clean.....	1	
Free from contaminating sur-			Well drained.....	1	
roundings.....	1		Removal of manure daily to 50 feet		
Construction of cowshed.....	4	.....	from cowshed.....	2	.....
Impervious floor.....	1		MILK ROOM OR MILK HOUSE.		
Raised standing space and			Cleanliness of milk room.....	3	.....
efficient gutters.....	1		UTENSILS.		
Impervious walls and easily			Care and cleanliness of utensils....	10	.....
cleaned ceiling or roof.....	1		Thoroughly washed.....	3	
Proper stall and manger.....	1		Sterilized in live steam for		
Provision for light.....	5	.....	15 minutes.....	3	
Daylight, 3 sq. ft. per cow....	3		(Placed over steam jet, or		
(2 sq. ft. per cow, 2; 1 sq. ft.			scalded with boiling water, 2)		
per cow, 1. Deduct for un-			Protected from contamination..	3	
even distribution.)			Cleanliness of milking stools... 1		
Artificial light.....	2		MILKING.		
Ventilation.....	6	.....	Care and cleanliness of milking....	12	.....
Air space per cow, 600 cub. feet	3		Clean, dry hands.....	4	
(Less than 600 cub. ft., 2; less			Udders clipped.....	2	
than 500 cub. ft., 1; less than			Udders and flanks washed and		
400 cub. ft., 0.)			wiped.....	4	
Provision for fresh air.....	3		(Udders cleaned with moist		
Air inlets and outlets through			cloth, 3; cleaned with dry cloth		
walls, 1; and roof, 1; win-			or brush at least 15 minutes		
dows to open widely, 1.			before milking, 1)		
Bedding.....	1	.....	Fore milk discarded.....	1	
Facilities for cleansing.....	1	.....	HANDLING THE MILK.		
(Water supply for washing			Cleanliness of attendants in milk		
stalls, gutters and gangways,			room.....	1	.....
and for hands of milkers.)			Milk removed immediately from		
UTENSILS.			cowshed without pouring from		
Construction and condition of			pail.....	2	.....
utensils.....	1	.....	Cooled immediately after milking		
Water for cleaning.....	1	.....	each cow.....	1	.....
(Clean, convenient and abundant)			Cooled below 50° F.....	5	.....
Small-top milking pail.....	4	.....	(Cooled below 54° F. 3)		
Steam.....	1	.....	(Cooled below 58° F. 2)		
Milk cooler.....	1	.....	Transportation below 50° F.....	1	.....
Clean milking suits.....	1	.....	Transportation in proper vessels...	1	.....
MILK ROOM OR MILK HOUSE.			Total		
Location: free from contaminating				60	.....
surroundings.....	1	.....		
Construction of milk room.....	2	.....		
Separate rooms for washing utensils					
and handling milk.....	1	.....		
Total	40	.....		

Equipment..... + Methods..... = **Final Score.**

NOTE 1.—If any exceptionally filthy condition is found, particularly dirty utensils, the total score may be further limited.

NOTE 2.—If the water is exposed to dangerous contamination, or there is evidence of the presence of a dangerous disease in animals or attendants, the score shall be 0.

the inspector at one visit, he is anxious to improve upon it before the next visit, and the methods of improvement are clearly defined for him. Thus the man who adopts modern methods not only receives a better price for his milk, but the general standard of production is raised.

There should be grades of milk, and towards this a step has been taken by a provision in the Milk and Dairies Act for "certifying" milk. Certified milk is going to be expensive. It will have an increased value, and those who want it will only get it by paying for it, but the important point is that, for the first time, a standard of cleanliness is set up. There will be no better milk than the certified milk and, as has been found in the United States, wherever there is a farm producing certified milk, it will be the means of educating all those in the vicinity who are engaged in the milk trade.

The clause in the Milk and Dairies Act authorizing the use in connexion with the sale of milk of the designation "certified milk," prescribing the conditions subject to which milk may be sold under such designation and prohibiting the use of such designation in connexion with the sale of milk in respect of which the prescribed conditions are not complied with is of great importance.

It is assumed that the standard of certified milk in this country will be as high as that for the same quality of milk produced in the United States. There the farm must be regularly in-



INFANTS' DEPARTMENT. MEDICAL CONSULTATION

spected, the employees and the cows must be under constant supervision, the entire herd must be free from tuberculosis, the milk must be bottled on the farm and must contain, at the time it is sold to the consumer, not more than 10,000 bacteria per cubic centimetre. It will be illegal for any one to use the term "certified" in connexion with milk unless authorized to do so by the "certifying" authority. In America some states have passed a law making it illegal for any one to use the word "certified" unless the milk is produced under prescribed conditions and authorization has been given by the proper authority. It was most necessary that this safeguard should have been made, otherwise there was nothing to prevent an enterprising milk firm labelling its milk "certified" when it is the ordinary product.

One of the London dairy companies stated that the milk they sold was equal in all respects to American "certified" milk; they described the conditions under which American "certified" milk was produced and alleged that their methods were equally good. To prove their statement this milk was bought every day for a week and was sent for bacteriological examination. The examinations showed that there were 800,000 bacteria to the cubic centimetre in the cleanest sample, and 8,000,000 to the cubic centimetre in the dirtiest; "certified" milk in America must not contain more than 10,000 per cubic centimetre.

Milk should also be sold in grades. "Certified" milk should be the highest quality and should sell in normal times for 8d. per quart and be bought by those who can afford in special cases or regularly, to buy the cleanest, most wholesome milk it is possible to produce. Below this there might be another grade called "inspected milk." This, too, should come from herds free from tuberculosis, from premises carefully inspected and should not contain, at time of sale, more than 60,000 or at most 100,000 bacteria to the cubic centimetre. To lower the cost, this milk could come from the farm in suitable churns and be bottled at the distributing dairy. The grade below this should be termed "market milk." Perhaps the day may come when all producers will produce only the higher grades, although that day is doubtless a long way off. A shopkeeper should be required to state what grade or grades he desires to sell and should have to obtain a licence to sell such grades. He should also be required to label all receptacles with the grade of milk contained in them.

If milk be cooled the bacteria do not increase as rapidly as they do if it remains warm, consequently all milk should be cooled immediately it is drawn from the cow. If clean and kept at a proper temperature milk can be shipped from here to San Francisco without any preservative and arrive sweet. The Government thus far have done nothing towards making railways provide refrigerated cars for the conveyance of milk,



INFANTS' DEPARTMENT INFANT ROOM.

as has been done in the United States, but such vans should be provided even if a higher rate has to be charged for their use.

Such proposals need not be enforced by Act of Parliament ; they depend upon the judgment and good sense of the farmer.

Score cards are an education in themselves, and most of the described conditions are quite within the reach of all.

Distribution is another part of the problem which must be tackled. In proportion as the milk supplies become less and the prices rise, consumption in poor homes, where milk is indispensable for child-life, will cease and the milk will tend only to reach better class houses where larger quantities are consumed, where the trouble of delivery is less and where the question of payment does not arise. What this would mean to mothers feeding their infants, to artificially fed babies, to the weak and sickly, needs no emphasizing.

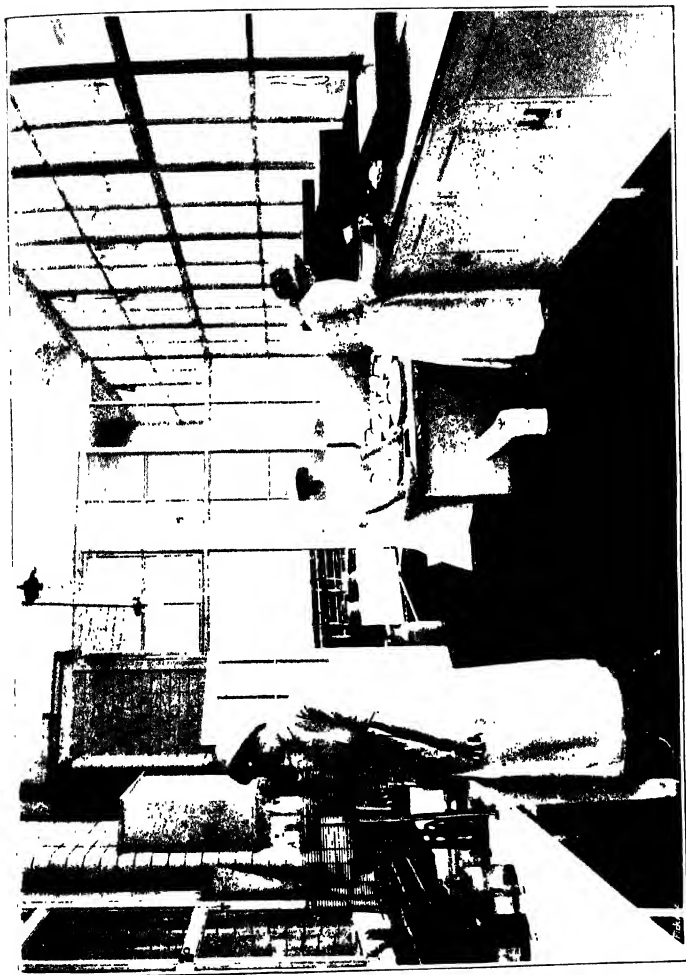
Undoubtedly the first war-time need is for a more equitable distribution of the available milk and a reduction of the unreasonable number of milk retailers. The public are at present paying for superfluous labour instead of for milk ; they are paying four or five different milkmen, at least, in every city street to distribute a commodity used by every one. Milk should be delivered, like letters, and only the amalgamation of interests and co-operation in the place of competition can bring about such an improvement. Never-

theless, it almost surpasses the wit of man to get any great public question, however vital to general well-being, discussed on its merits. The vested interests involved, always deeply entrenched and strongly fortified by others not concerned, will discuss anything but the real issue at stake, with the result that confusion is imported into the issue which deteriorates into a purely mercenary discussion.

Attempts to apply municipal or State control of milk supply and distribution will at once be labelled "socialistic," and however erroneous this conception may be, it will be difficult to remove the deep-seated prejudices that such schemes cannot fail to disclose.

There is, however, no necessity to impose injustice upon any section of the trade nor to penalize the farmer or the dairyman. As has been shown, the farmer will be well compensated for improved methods in receiving a higher price for better quality; the dairyman would receive reasonable payment for anything in the form of plant and goodwill which a controlling agency might acquire; and lastly, half the labour engaged in distributing milk can be released for other occupations, and as the men concerned are either agriculturists or semi-agriculturists, they will for years be worth more than any equivalent number that could be set free.

At the same time, the protection of the public health and resulting advantages to the community are the supreme test of the value of clean milk



INFANTS DEPARTMENT MILK LABORATORY (No. 1)

reforms. If ever there was a time when it was necessary to preserve every jot of vitality and health, that time is surely now when we shall be called upon to recuperate after the cruel ravages of the greatest war in history.

Towards the end of 1916, the Bradford Health Committee sought powers from the Government departments concerned to enable the Corporation to acquire a complete monopoly of the milk distribution in the city. At that time these were refused, but fifteen months later Lord Rhondda, then Food Controller, offered to confer the necessary powers; but unfortunately the City Council, changing its mind in the meantime, declined to accept them and thus allowed a magnificent opportunity for taking the greatest single step on the high-road to public health that has ever been offered to any local authority in the kingdom, to go by the board.

CHAPTER IX

A MINISTRY OF HEALTH

No one familiar with the chaos, confusion and cost of health administration in this country will ever question the need for an entirely new department to focus and co-ordinate the whole. But those with actual knowledge and experience of the problem involved may well doubt the wisdom of inviting a Parliament absorbed with the world-wide ramifications, the anxieties and perils of war, to attempt its solution before the greatest life-and-death struggle in history has passed.

Public health services are administered by at least a dozen separate Government Departments. The War Office and the Admiralty, through their own medical staffs, are responsible for the Army and Navy ; the Post Office and the Ministry of Munitions have each their own services, while public health functions of a general character affecting all civilians are exercised by the Local Government Board, the Insurance Commissioners, the Home Office, Board of Trade, Board of Agriculture and Board of Education. The Board of Control supervises mental deficiency and the Privy Council is concerned with the training and conduct of midwives.



INFANTS' DEPARTMENT, MILK LABORATORY (No. 2)

In addition to this multiplicity of authorities, there is an accumulation of departments within them, each with its administrative staff. The Insurance Act is administered by four separate Commissions for England, Scotland, Ireland and Wales and a Joint Committee for the United Kingdom ; the Home Office has no less than eight public health staffs, and these illustrations are typical of many more.

The same overlapping and waste are found among the local authorities, for the Health Committee, the Watch Committee, the Education Committee, the Mental Deficiency Committee, the Board of Guardians and the Certifying Factory Surgeons are all engaged in public health work. Every new Act of Parliament seems to have called into being a new department in London and a corresponding authority in the provinces.

It is in the hope that this "muddling through" might be superseded by a system to co-ordinate the public health services of the Kingdom that a Ministry of Health has been foreshadowed and is earnestly desired by all public-spirited men and women. Yet strangely enough it is the latest public health authority and the only one not responsible to the public for the public money it spends which has been subordinated by interested sections to cajole and hustle Parliament into rushing such a measure on to the Statute Book.

Apart altogether from the co-ordination of the Departments already existing and previously referred to, the Insurance Committees seek ,

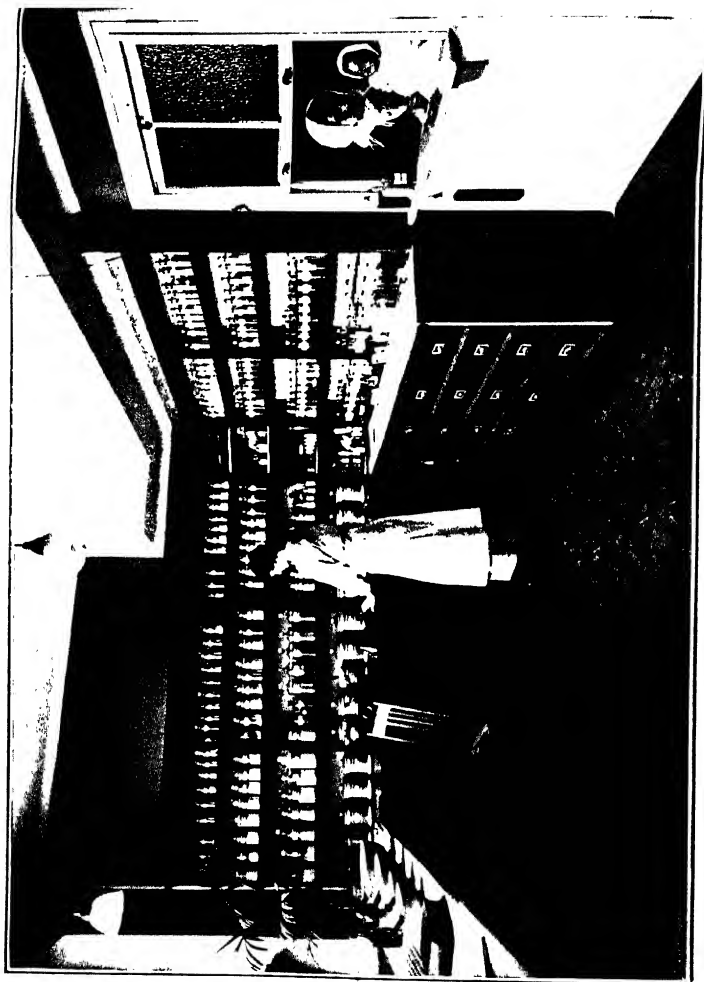
through the new Bill they have drafted, to transform the Poor Law ; to claim a voice in the policy and a share in the administration of public health work ; demand that any further powers conferred on local authorities should also be given to them ; ask for the creation of a new body to be known as the Hospital Authority—raising the whole question of the medical services ; require Government grants to be placed at the disposal of bodies not subject to the control of the electorate ; the granting of votes by Parliament for unspecified purposes ; and the setting up of large staffs at the public expense to carry on duties already discharged by public health authorities.

If we wish not only to perpetuate but to multiply all the defects a Ministry of Health is intended to eradicate, this attempt to convert a misleading Bill into a war measure is the most effective way of doing so, and at the same time of imposing an irreparable injury on the future. As to the wisdom of taking public money out of public control, Mr. Hayes Fisher, President of the Local Government Board, said to a deputation quite recently : “ On the subject of certain proposals to transfer public health work from elected to non-elected bodies, my voice will always be raised as strongly as possible, in office or out of office, in favour of the locally-elected authority, on the ground that that is the most proper and competent authority to deal with such questions.”

It is significant that the people who have adopted

these rushing tactics represent three sections: first, the great financial corporations who have most to gain; second, those with least experience of the vital issues involved; and third, those with none at all. The majority of these seem to think that if they are doing something in the name of public health—it does not very much matter what—they are making headway, for to them all motion and change mean progress; it does not appear to them that it is possible to go back as well as forward, or that too high a price can be paid even for gold. Such well-meaning and enthusiastic people are singularly liable to forget that there is scarcely a single Act of Parliament on the Statute Book that has realized all the hopes of its promoters, that in many instances they have failed altogether to achieve that purpose, while in not a few, of which the Grocers' Licence may be taken as typical, they have actually multiplied the very evils they were intended to suppress. The large industrial insurance companies, who appear to be the real authors of the only Bill for the creation of a Ministry of Health that has yet been published, exhibit a discreet unwillingness to come out into the open and own their offspring, though the notorious profits accruing from the life insurance of infants and young children, and the possibility of its material extension under the benevolent aegis of the Insurance Act, make them willing to pay the piper and leave to others the credit of appearing to call the tune.

One gathers that their strenuous objection to overlapping is not insurmountable, though it is supposed to constitute one of the chief reasons for promoting the Bill. Up to this point, the new organization of mutually interested forces has done well, for it has so far convinced the voluntary workers, who are equally anxious to share the spoils, of the probability of its ultimate success, that they have exhibited some willingness to jettison valuable portions of their cargo, lest the whole should be lost through their inability to secure representation. The only fly in the ointment has been put there by the Prime Minister's request that, in order to rush the Bill through Parliament as a war emergency measure, it will be necessary for all the authorities involved to arrive at some definite agreement, and so, for the first time, the great Government Departments involved, and the local authorities throughout the land who co-operate with them and owe their allegiance to the people who find the money, may at last get a hearing. How far agreement is either possible or desirable, remains to be seen, for there is one recent and outstanding example of that policy which scarcely commends the precedent, and that is the Insurance Act, whose glaring defects, and the necessity to remove them, is urged as another great reason for indecent haste. That measure was converted into an Act of Parliament by the most flagrant trafficking with the interests concerned, and the wholesale buying off of opposing forces reduced its usefulness to a



shadow of the possibilities inherent in the great underlying principle upon which it was reared. This was the outcome of a determination to pass it by hook or by crook, but there can be little doubt that had it been withdrawn, and in the light of the facts revealed an entirely new Bill drafted, a mighty advance would have been recorded for the healing services of the kingdom, based not upon the costly, disappointing and futile attempts at cure, but upon the only justifiable work of prevention. Indeed the more carefully this plausible and specious policy of agreement is considered, the more convinced must every citizen become, that it would once more prove to be the high-road to colourless compromise, the perpetuation of the very evils it seeks to eradicate, and an ostentatious and ill-devised instrument for public well-being. It is never difficult to make a big noise if all the steam is blown through the whistle, but one hopes for something more substantial if solid headway is to result, and the life of the common people become more truly worth living. The present bill cuts at the root of the representative system by introducing the anti-democratic principle of co-option, on the pretext that the personnel of public authorities would be thereby improved. Thus deliberately to open a back-door of admission to the great public spending departments which would make it easy for those unwilling or unable to enter by the front, would not only introduce persons of exceptional ability and fit-

ness, but also the representatives of vested interests, whose tentacles are being pushed further and further out, in an ever-increasing number of directions, and whose costly and scientific organization and subtle influence often accomplish by subterranean devices results which the public can neither understand nor account for. Health Committees of Corporations are engaged in maternity and child-welfare service, and as this affects women and children it is felt to offer an exceptionally useful sphere for voluntary workers, and so they seek admission to the authorities, not through the recognized medium of the ballot box, but through the back-door of co-option. These well-meaning, enthusiastic, and altogether excellent citizens see nothing but the actual goal they have in mind; it never seems to occur to them that the reason they urge for membership of Health Committees would be equally forceful when put forward by others who had entirely different objects in view, and that if the one were admitted the other could not be refused. For instance, a Health Committee whose inspectors are engaged in supervising, amongst other things, cattle, food-stuffs and slum property would, if admitting co-option for maternity and child-welfare work, immediately be approached by farmers, on the ground that their special knowledge and experience of cows, and the conditions under which they live, would be particularly helpful to the Committee, and that consequently they desired to place their



INFANTS' HOSPITAL WARD.

services at its disposal. The local Chamber of Trades, as, representing the shop-keeping community, would be equally public spirited, pointing to the fact that their daily round and common task brought them into direct contact with the problems that confronted the Committee from time to time, and whose solution they wished to facilitate and expedite by the presence of really helpful, disinterested representatives; and in the same way the Ratepayers and Property Owners Association having a direct interest in and peculiar information about, slums and slummers, would not willingly withhold these pearls of wisdom from a Committee confronted by innumerable difficulties which they would be more than anxious to remove by being present at, and taking part in, its deliberations; and so on *ad infinitum* till the whole gamut of its extensive duties were subjected to poachers acting as gamekeepers. Under such circumstances the representative system would be killed, for it is certain that neither men nor women would continue to face the turmoil and expense of elections—which are the vital breath of democratic progress and the most effective stimulant to public interest—if privileged persons were enabled to walk in without either, and having got there to exercise power, without any of the responsibility of properly elected representatives. Indeed, the enemies of democratic institutions must be rejoicing as they add plausible and specious fuel to a fire that threatens the very existence of

a system without which we should be thrown back into the dark ages. The aldermanic bench has long been recognized as an anachronism that violates popular election, and as fore-doomed to extinction, and while many estimable men adorn these seats of privilege and authority, the overwhelming proportion are notorious retrogrades whose attempt to win an election would be fatal, but whose presence goes far to neutralize, if not to nullify, the usefulness of duly elected representatives. It is very significant that this increasing menace of co-option is of strictly modern growth ; when the seats on local authorities were the monopoly of employers of labour and rich men, the need does not appear to have existed, though these public-spirited citizens built our higgledy-piggledy towns and cities which, generally speaking, are devoid of the most elementary indications of outlook and vision and have proved to be death-traps for infant life, hotbeds of tuberculosis, and the known enemy of every man, woman and child pre-disposed to disease. Since that day, the rank and file have been compelled to organize for more reasons than one, and have slowly but surely learned the importance of returning men of their own class to public positions, with the result that local authorities have become forces for the betterment of the community largely in proportion to the number of such men who have sat on them. Co-option on education committees, which constitutes the thin end of the wedge, does not justify the extension, for

while the result has been unobjectionable where progressive majorities already existed—as in Bradford, which has always kept co-option down to a minimum—it cannot be denied that in many places it has been used for other than strictly disinterested educational purposes. In any case democracy, like every other form of government, must suffer whatever weaknesses are involved in it, until teaching and experience have been sufficiently thorough to eradicate them. Sincerely as one would welcome women on public bodies, it must not be at the expense of opening the sluice gates to jobbery and corruption, and there can be little doubt that if they would throw themselves as whole-heartedly into propaganda work, and electioneering with that object in view, as they do into devising ways and means for getting there by circuitous routes, the electors would respect them all the more and ultimately repose their confidence in them. In the meantime it is imperative that there should be only one way on to public bodies, and that the ratepayers should reap the results of their own deliberate choice. To begin to modify that great democratic position in the name of a Ministry of Health proves once more that “the price of liberty is eternal vigilance,” for its ultimate effect would be to disfranchise the possessors of the vote, and to destroy national and local well-being at the very time when popular interest in it ought to be rapidly increasing. For insurance committees, or, more properly speaking, the representatives

of approved societies on them, who constitute three-fifths of the total membership—to toy with and forfeit the rights of those they represent for a totally different purpose, is unconscious treachery.

One singularly extravagant and indeed unwarrantable statement has unfortunately been associated with the new Bill; this is, that it would save 52,000 babies' lives a year; as only about 90,000 infants die in England and Wales, the announcement is not only ridiculous, but will prove to be seriously prejudicial to the Ministry when it is formed, because, owing to the multiplicity of intersecting social, industrial and moral causes, the new Ministry will be totally unable to fulfil the promises now so flippantly made in its name. The value of new power to those willing and anxious to apply it, would be tremendous, but those who decline to get the best out of the power we already possess are not the authorities calculated to use a new opportunity simply because it is put into their hands. This remarkable reliance on machinery does our judgment no credit, and the belief that some sort of compulsory power could be given and drastically applied, ignores the fact that we can neither legislate nor administer far in advance of public opinion, however unanswerable the need.

Bradford, without these facilities, has done for maternity and child-welfare more than the great bulk of authorities would be willing to do with them, because it had an intelligent, alert and public-



INFANTS' HOSPITAL. BATHROOM.

spirited community, and the great need in this country is not so much organization and machinery, as patient, plodding, persevering spade work among the people. True advance lies along the lines of promoting discontent with mean materialism and a desire to turn to mutual helpfulness and justice.

If those who are clamouring for a Ministry of Health would throw their time, ability and enthusiasm into preparing the people for it, instead of concentrating their energies upon rushing an ill-considered and sloppy Bill through a Parliament whose judgment is, of necessity, subjugated to the exigencies of war, they would be rendering a far higher service to the nation.

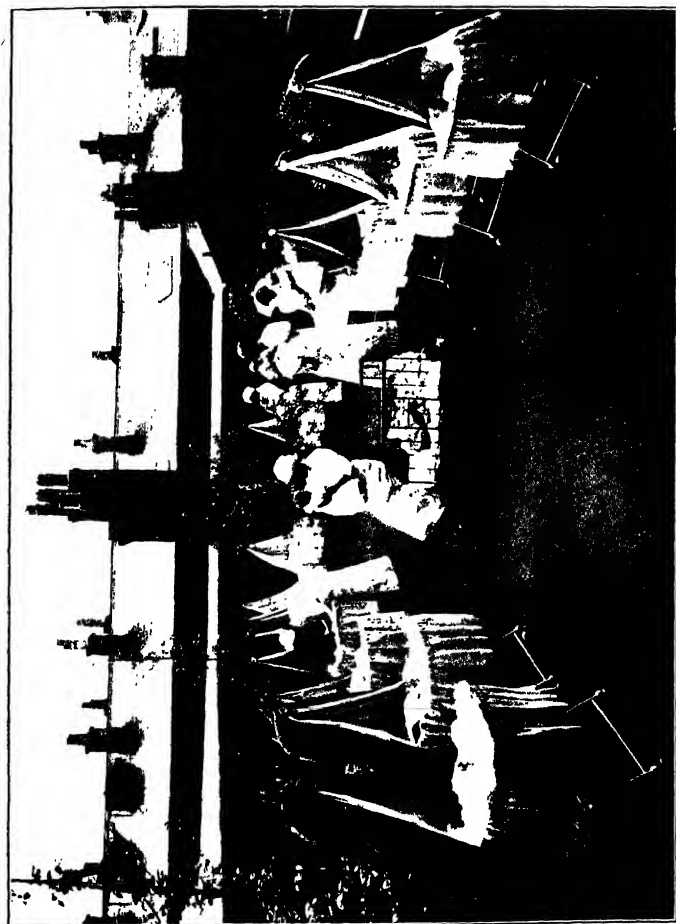
Perhaps the most glaring defect of recent legislation has been the creation of new national and local organizations that seem to have accompanied every Act, and which have immediately been followed by a determined attempt to consolidate the new position and magnify the new office. The most glaring of these have undoubtedly been the insurance committees, or, more properly speaking, those who have claimed to speak for them, but who have in reality not been prompted by the committees at all, but by aggressive interests parading in their name and meeting in London.

They have evidently come to the conclusion that if the industrial insurance companies, the medical profession and the insurance committees could appear to stand together, they could then

demand and enforce any measure they cared to draft and hand to the Government Department concerned to pass through Parliament. But there are times when it becomes necessary for the nation to ask whether it, or the interests that profess to serve it, are to be paramount, and this is surely one of those occasions.

The great industrial insurance companies are on the whole rendering valuable service to the nation ; but it cannot be denied that it is essentially work that the State could do much more helpfully, and, in very many ways, more profitably. In like manner the insurance committees are engaged in necessary labour, but they are largely skeletons at the feast, depending on the medical profession and the local authorities to act for them.

The medical profession is one of the greatest in the land, but there is no self-respecting member of it who would claim that the present system, or, to be more accurate, want of system, enables it to give anything approaching the best of which it would be capable under a carefully thought-out and well-regulated State Department. When the medical and surgical professions in the kingdom have been freed from the commercial instincts that obsess us and the unconscious but deep-seated prejudice that prevents their reaching the highest ; when the status of the medical services has been so raised that the nation is as eager to bestow dignities upon those who distinguish themselves



INFANTS' HOSPITAL. OPEN-AIR BALCONY.

in abolishing needless disability and pain, as it is to reward captains of industry who amass private fortunes, doctors will have become the life guards of suffering humanity and will learn through the medium of more open minds that the body is largely dominated by mental attitude, while the seat of real happiness and health is in the sanctuary of the heart whose builder and maker is God. In that not far distant day, adequate incomes will be assured to all who minister to the sick in body or in mind, their time will be conserved instead of wasted in overlapping practices, reasonable opportunity for leisure will supersede their liability to be called upon at any one of the twenty-four hours of every day, and experience will prove that it is better to lead a life worth living in national service than to enjoy the so-called freedom and independence of private work.

It will then be possible to admit that the limitations of knowledge and opportunity make research and specialization a necessity in order to obtain the highest results; the united forces will be organized together with the sister profession of nursing, and the efficiency of public institutions will no longer be determined by the size of their subscription lists. The whole community will then be brought into touch with the widest knowledge and the finest skill the nation can develop, for need and not money will be the *open sesame* to health. Should not the institution of a great Ministry of Health be pre-

ceded by a most thorough investigation into such questions as these, rather than hastily calling into being an ill-considered and futile State Department.

When the war is over, men and women will want new ideas and ideals to help them to forget the horrors of the time that has passed. They will learn that a life of disinterested and helpful service is the only life worth living, one that would establish the Kingdom of Heaven on earth, and pour music, colour, sunshine and gladness into every home and every heart. Why cannot we turn aside from our old mistakes and step out into the new day ?

CHAPTER X

THE NATIONAL BALANCE-SHEET

WERE we half as anxious to prevent the deadly evils which our indifference permits to grow through periods of material prosperity, as we are to devise ways and means for accumulating wealth, the Government would invite its Blue Book experts to collaborate in the collection of a much more comprehensive and informing report and balance-sheet than any that has yet been attempted. They would be asked to condense into one volume such departmental data as would enable reasonably reliable conclusions to be drawn as to the soundness or insolvency of the national concern as a whole. Assets and liabilities would show not only our fabulous wealth, industrial greatness and military and naval power, but also the number of inmates of our prisons, workhouses, hospitals and asylums ; not only the number and extent of our great country houses and fine suburban villas, but also the number and condition of our overcrowded and insanitary hovels where the poor eke out an animal-like existence ; not only the stately architecture and

lavish equipment of our universities, colleges and public schools, but also the gin palaces, gambling hells and houses of ill-fame into which the human moths fly and are consumed. They would show our magnificent cathedrals and churches, and over against these our horrible scrap-heaps of sin and sorrow and shame, bearing witness to the appalling gulf between religious profession and Christian practice. The National Balance-Sheet would contrast the number of mothers and infants who had been protected and cared for by every means that medical skill and trained nursing can devise, and also the number of mothers whose lives had been needlessly lost in child-bearing, or whose health had been unnecessarily broken through lack of ante-natal supervision, proper attention during confinement and reasonable after-care; the number of infants who had been culpably sacrificed before birth, the number who had suffered avoidable death during the first year of life, and the number of those who for similarly discreditable reasons must be a burden to themselves, their parents and a guilty nation, until death releases them. We cannot, and we dare not if we could, have an annual "march past" of these two sides of the national balance-sheet, but if our cinematograph companies were to throw their enterprise into the production of such a film of alternating conditions, and send it throughout the length and breadth of the land, they would become mighty reforming agencies, creating such a revulsion of feeling as would



INFANTS' HOSPITAL. THE RAW MATERIAL

render impossible a continuance of the dehumanising conditions.

In an average year 700,000 people die in this country, and it is estimated that the estates which actually passed during the five years 1904-5 to 1908-9 were worth at least an average of £350,000,000 per annum, and that 4,000 people left about £250,000,000 of that amount, and the remaining 696,000 the rest. Or to put the same thing in another way, over 70 per cent. of the value was left by less than 1 per cent. of the people who died, and less than 30 per cent. by over 99 per cent. of the deceased.

In 1910 the valuation for the United Kingdom was £14,250,000,000, £13,000,000,000 of which is estimated to be owned by $1\frac{1}{4}$ million persons, out of the 45 million inhabitants, which means that over 91 per cent. of this wealth is owned by less than 3 per cent. of the people, and less than 9 per cent. by over 97 per cent. of the population. How far do these proportions or the system that permits them, tally with Christian conceptions?

Trade is worst when need is greatest. Ability to purchase commodities is least when the supply is most abundant. We get the significant and suggestive combination of idle looms, bare backs, and starving investors at one and the same time. The looms are there, the workpeople who mind them are out of employment, the need for the materials they produce is indisputable, and the money that is necessary to their running is locked

up waiting to be used. Why cannot these separate parts be induced to co-operate? Because the primary purpose for running machinery is not directed to the supplying of human needs but to the producing of private profits, and, in the meantime, the looms have woven, not more cloth than is wanted, but more cloth than the public can buy.

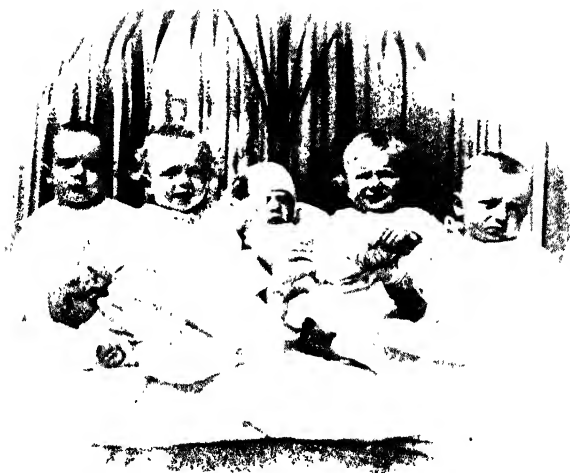
As soon as stocks have been depleted and the necessary margin of profit can again be assured, the wheels once more begin to run round. But there cannot be a surplus so long as there is a need, and, when that has been supplied, the outlook upon life should be broadened by shortening the hours of work and enriching the added leisure, in order that machinery which has been invented to save labour may not be employed, as at present, to displace it.

The speeding up and improving of machinery has benefited the world by cheapening commodities, but it has also intensified labour without conferring upon it anything like that corresponding reward which the workers are clearly entitled to share, in the undoubted advantages that human ingenuity and their more exacting toil confers upon men.

Employers of labour have long, and rightly, striven to see who could produce the best article at the lowest price, but it would be an immense advantage to the community if they would begin to compete in order to ascertain who could provide the best conditions for labour, run the shortest



INFANTS' HOSPITAL. THE RAW MATERIAL



INFANTS' HOSPITAL. THE FINISHED ARTICLE.
(The figure above is a member of this group)

hours and pay the highest wages. Nothing is more typical of the ultra conservative mind of industrialism than the way in which its leaders are anticipating the future as though the war and its revolutionizing experiences had never been. They make no really serious attempt to appreciate the wisdom of substituting the co-operation of the trenches for the antagonism of the factory, which not only divides but is pregnant with disaster. Yet it must be clear that the world neither can, nor ought to be permitted to become the same again, and therefore the only thing to be determined is whether it shall be made better or worse.

Right through the great industrial era the stupendous mistake has been made of putting the cart before the horse, by assuming that men have come into the world to work and to make profit, instead of to live to serve one another, with the result that all the prizes have been reserved for selfishness and all the blanks for altruistic service. The illusion has been steadfastly maintained by the deception of appearances, for the wonderful accumulations of wealth, and the unquestioned sectional prosperity that have grown out of it, have blinded us to the never-ending human wreckage that the callous competitive system has thrown up.

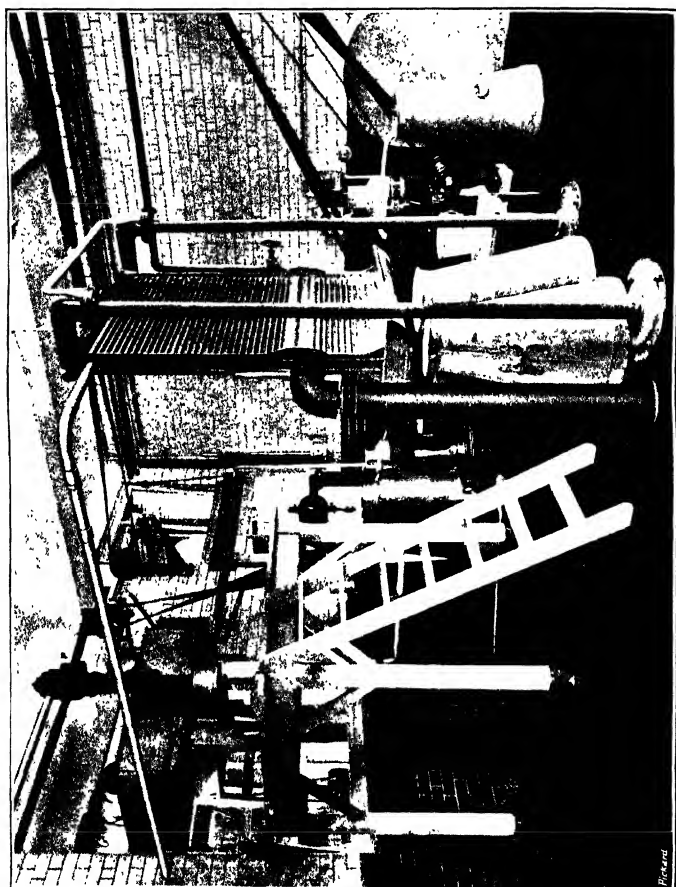
If we have all come into the world to live a full and ever-expanding life, physical, mental and spiritual development must not only be provided for, but secured. Every man should

have a perfect right to live, provided he is able and willing to earn that livelihood ; if he is willing but unable through circumstances over which he has had no control, he should be maintained in respectability and comfort without being dubbed and stigmatized as a pauper ; if he is able but unwilling he should still be entitled to the option either to work or to starve. Clearly the very first duty of the State is to bring together land, labour and capital, in order that each may help the other to become profitably employed. Instead of doing so, we either maintain, or tinker with, those forms of land tenure and taxation which are best calculated to keep the three apart.

To tell a man who suffers from cancer that there is a remedy if, and when, the people responsible for introducing it can be persuaded to apply it, is like adding insult to injury, for in the meantime, the disease is progressing and its victim will die.

Between 1851 and 1901 the number of people engaged in agriculture decreased by 1,294,005, or 38 per cent., and the movement of the population from the country to the towns maintained in the great centres of industry that surplus of available labour which is the most effective instrument for depressing wages.

The glamour of big cities is undoubtedly great, but we have never seriously faced the land problem of this country till war has compelled us to do so. Some light may be thrown upon it by the fact that 2,250 persons



THE LADDER LEANS AGAINST THE WALL OF THE BOILER ROOM.

Pickard

own one-half of England and Wales, while 1,700 possess nine-tenths of Scotland. But easy access to land and genuine security of tenure are not the only indispensables; cheap and accessible railways, land banks to supply men who have ability with the necessary loans, co-operative buying and selling, decent housing accommodation, adequate wages and reasonable opportunities for social intercourse are equally necessary. It is on these and similar lines that the great agricultural areas must be re-populated, and should begin to yield not only dairy produce, fruit and other commodities, but also the necessary stock of manhood upon which our industrial centres depend but which they cannot rear till an entirely new standard of human values obtains in them, for it is no exaggeration to say that hitherto no country has meant no town. With such new opportunities, however, men, both on the land and in the cities, would secure not what a surplus labour market will yield them in the form of wages, but what they actually earn.

If there is nothing wrong with poverty and wretchedness, why are we so keen to call the attention of every one to any effort made to alleviate the lot of the poor?

Were it possible to compel every town and city to show, not only to strangers but to their own citizens; those who have been driven under by selfishness, by injustice or by ignorance, the old methods would soon be scrapped. It is easy to be an optimist if one can ignore facts, but optimism

is only justified where men are making strenuous and sustained efforts to destroy the forces which produce the damaging side of our balance-sheet.

If the degree of progress or retrogression as determined by the relative number of its human derelicts in each city were carefully ascertained every five years and the result of the quinquennial investigation published broadcast, a redeeming rivalry would be instituted, and a wonderful transformation might grow out of it.

One of the most urgent needs of every great city is the preparation of a thoroughly comprehensive and carefully co-ordinated decennial record of its activities.

One half of a city does not know how the other half lives, and this is largely responsible for the perpetuation of evil. Each department of municipal, educational, moral, social, industrial and other forms of civic enterprise has a more or less complete record of its own work known to those members of the community actually associated with, or directly interested in it, but outside that particular section there is almost as much ignorance as though the knowledge were purposely kept in water-tight compartments.

This arises because it is nobody's business to collect and edit the epitome, a duty the Corporations might well undertake through their respective Town Clerk's departments. Such an invaluable book, to which reference could be made at any time, and from which reliable data could be obtained, would constitute a summary of city



MILK DEPOT. TESTING LABORATORY.

life and progress more illuminating and helpful than long years of residence and active interest could supply.

The volume should be indispensable to every organization, public library and club and to every man and woman who could afford to buy it. It would be a faithful and unbiased balance-sheet to educate public opinion upon not only the good but also the bad aspects of city life, throwing into relief not only the human and material assets which we always remember but also the corresponding liabilities, so often out of sight and out of mind.

From the standpoint of enlightened selfishness alone, the industrial, social and moral conditions, to which attention has been called, cannot be justified. Hitherto the rank and file have failed to understand the significance of the scientific organizations arrayed against them, but education and experience are at last compelling them to realize that huge aggregations of capital in the hands of few men are proving a menace to human progress, both at home and abroad; that trusts and combines, instead of multiplying opportunity alongside the spread of education, are slamming the door in the face of natural ability, and converting an ever-increasing number of men into mere hewers of wood and drawers of water; that monopolies grow rich on the poverty of the poor, and make it increasingly difficult for honourable traders to live; that the "bulling" and "bearing" of markets cause violent fluctuations in trade, and corresponding irregularity in employ-

ment ; that the cornering of food and raw material upon which life and industry depend, imposes hardship and suffering upon whole continents.

Men are forced to depend upon the State because mutual consideration and fair play have broken down ; but, in the long run, even the State cannot rise higher than the individuals of whom it is composed. It is deeply to be regretted that money has not brought with what it can buy the willingness to regard it as a trust, while forty years of compulsory education have borne in upon the great body of workers the fact that they do not get a fair share of the wealth they help to produce and which they now demand.

In the future, wages will have to be made the first charge upon industry, and be high enough to enable the workers and their families to be reasonably housed, clothed and fed, for trade can only be justified by serving men, not by victimizing them. In the meantime, the war has taken its terrible toll of our best manhood, has compelled us to delegate to the depleted ranks of less capable men those enormously extended responsibilities and powers it must bequeath, and upon the use of which the weal or woe of the future inevitably depends, and while it is struggling with such momentous problems there comes the reminder of neglected duty to men, women and children who were potential assets of the State, and whom we have allowed to die or become national liabilities. Tuberculosis, for instance, is essentially a poverty disease, but it is also a preventable

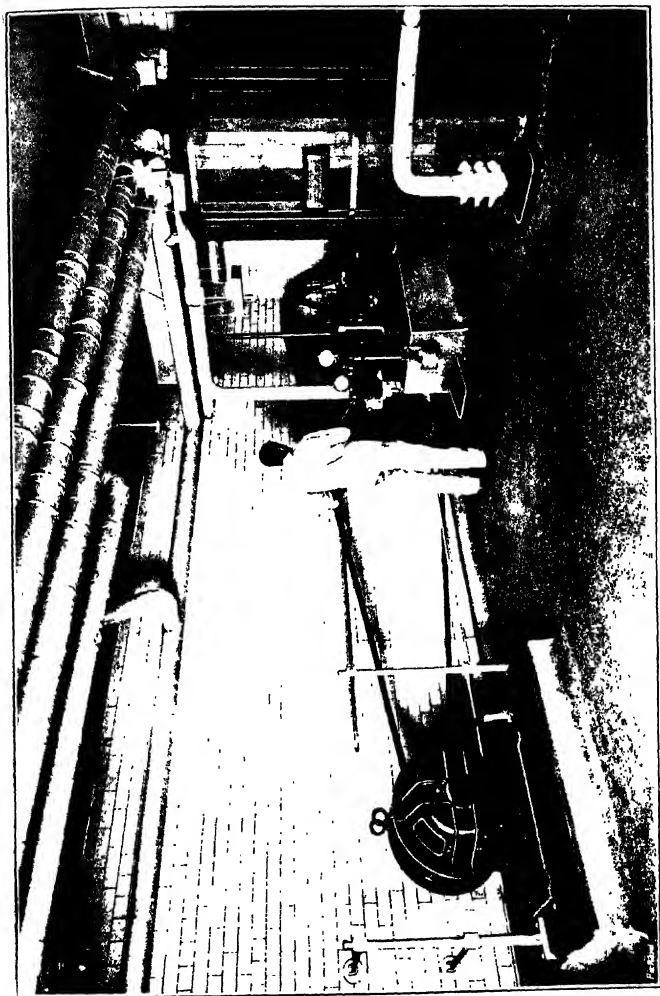
disease. Fifty-six per cent. of the deaths take place between the ages of twenty and forty-five years, a period which should constitute the best part of a working-man's life. Statistics destroy the human value of figures, and we are singularly liable to forget that so many deaths per thousand often means so many tragedies per thousand, widowed women, orphaned children, desolate homes, and the penury that all too frequently foreshadows despair.

Many years ago Dr. Newsholme (now Sir Arthur), of the Local Government Board, estimated the average economic value of persons between fifteen and sixty-five years of age at £150 each, a value which the war has much more than doubled. On that basis the loss to the nation through tuberculosis alone is over £8,000,000 per annum.

Again, though we may provide public institutions for the victims of our indifference and neglect and thus relieve them of much suffering and their friends of a considerable amount of anxiety and care, in thus putting them out of sight we also put them largely out of the public mind and unintentionally continue the causes of their misery and pain. Thus we not only maintain a standing army of living witnesses to our incapacity to prevent the preventable, but keep them marching into these fatal shelters as fast as death carries out their fellow-victims. In this way our beneficent intentions, when reduced from the abstract to the concrete, actually help to per-

petuate the evils they so earnestly seek to cure.

When the war is over, it will be found that the prodigal sacrifice of the flower of our manhood has impoverished the nation in the only form of wealth that is worth hoarding, and just as the stress of circumstances has compelled us to turn to material rubbish heaps to recover much that had previously been thrown away, and to set store on the waste paper we formerly regarded as lumber, so even material considerations may ultimately drive us to search for men as we have grovelled for gold, and find in the process the crown which, from the very beginning, has been hanging above our heads waiting to be recognised and won. Saltaire is said to have been built out of material which was thought to have no more useful purpose to serve than packing goods that were landed on the docks at Liverpool: and Manningham Mills are reported to have risen from the utilisation of a waste product, and we rightly extend to our great citizens, Sir Titus Salt and Lord Masham, all honour for these solid contributions to our material prosperity. Why, therefore, cannot we devote more of our time and ability to the recovery and utilisation of human beings whom circumstances have misapplied or discarded, in the same way that our captains of industry won from waste the beauties of alpaca and silk? It is surely because we have failed to appreciate the supreme value and wonderful possibilities of human life that we have



MILK DEPOT. REFRIGERATING PLANT.

permitted men, women and children to be cribbed, cabined and confined in congested cages called cities, where they must live in smoke-polluted atmosphere, intersected by short, narrow, crooked streets that are walled in by black stacks of brick and stone buildings, resulting in the human inhabitants being shut in above, below and on either side, as though the noblest work of God were to be for ever subjected to the wonderfully illuminating irony of a visitor to the Zoological Gardens who wrote about the "spacious" cages of the eagles.

Even on the battle-field it is life that counts—notwithstanding all appearances to the contrary—and for that very reason the nation should welcome everything that foresight and ingenuity can contrive or money buy for the purpose of preserving it. The general who, through lack of military acumen or prudent pre-vision sacrifices an unnecessary number of his men in an engagement, is rightly cashiered and recalled. If the same every-day common-sense plan of campaign which governs men's attitude to armies were adopted at home, we should have saved more lives since the outbreak of the war than have been lost in consequence of it, and that is why we are told: "It is more dangerous to be a baby in London than a soldier in the trenches." We are rightly concerned about the colossal debt that is being piled up, but indifferent to the fact that our ability to liquidate it depends upon unborn babies, and unless we turn both our minds

and our money to the infants in the cradles, and the children in the schools, not only financial, but human bankruptcy awaits us, because of the rapidly declining birth-rate in the upper working and middle classes, the needlessly large infantile mortality and the correspondingly excessive physical deterioration which unfortunately exists in the ranks of those upon whom the continuance of the race will have increasingly to depend. This slaying at both ends, this destruction not only of the present, but also of the future, is sheer madness. How long shall we worship the god that destroys us? When will the illusion end and life, the only life worth living, the life spent in the service of others, begin? In the mighty tasks of reconstruction,

“ Let the dead past bury its dead !
Act—act in the living Present !
Heart within, and God o’erhead ! ”



MILK DEPOT STERILISING CHURNS AND BOTTLE WASHING.

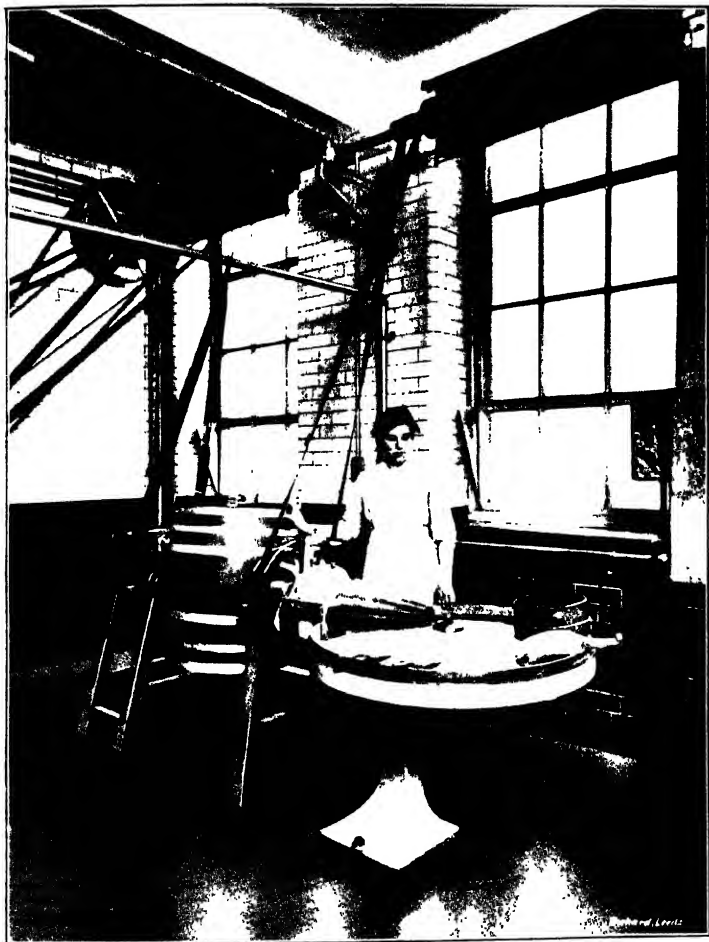
CHAPTER XI

“ Lighthouses in the Storm-Tossed Seas ”

WE have not only before us the supremely momentous task of stopping the fatal drift in families whose lineage has contributed so worthily to our national well-being, but we have to rescue those who are effectively undermining the best of which we should otherwise be capable. Our refusal to safeguard marriage, the most important and sacred human relationship in life, and our willingness still to permit an indefinite multiplication of the physically, mentally, and morally unfit, have created problems alongside of which all others pale into insignificance. Because we have ignored these perils and left the gravest of all questions to chance, there are mothers who are only such because every inhuman device has failed them ; mothers who violate every moral code ; mothers who drink, swear, and fight ; mothers who deliberately neglect, ill-treat, and assault their little ones within the four corners of the law, till disease, maiming, and death result ; mothers who are disappointed when their children live ; mothers who are verminous, slatternly, and unkempt ; mothers who are ignorant, indo-

lent, and shameless ; mothers who gossip with arms folded or akimbo from morning till night, and understand everybody's business but their own ; and all these women and their prototypes—a rapidly increasing number—are *actually providing a growing proportion of the next generation of mothers*. To retort that in the overwhelming proportion of these cases the fathers are as bad or worse, and treat their wives more as a convenience than as human beings, is but to damn more effectively the social order or, to speak more truthfully, the social chaos, that permits the dehumanizing conditions productive of these race destroyers, such as drink, gambling, and lust, overcrowded and insanitary hovels, low and intermittent wages paid for degradingly monotonous toil, and poor food, as lacking in variety as it is exorbitant in price. Amidst such surroundings, the dead hand of gloom, wretchedness, and despair is inevitable, and it is as apparent as it is disgraceful to every self-respecting citizen, that such infamous hotbeds of degeneracy, disease and crime can only exist in a nation that has not sufficient intelligence and public spirit (not to mention conscience) to destroy the fungus that is rotting its vitality.

These social, industrial, and moral monstrosities constitute an enemy within the gate who never sleeps, but every day, every week, every month, and every year for generations has pursued his deadly "frightfulness" among us ; yet instead of resisting his onslaughts and driving him out



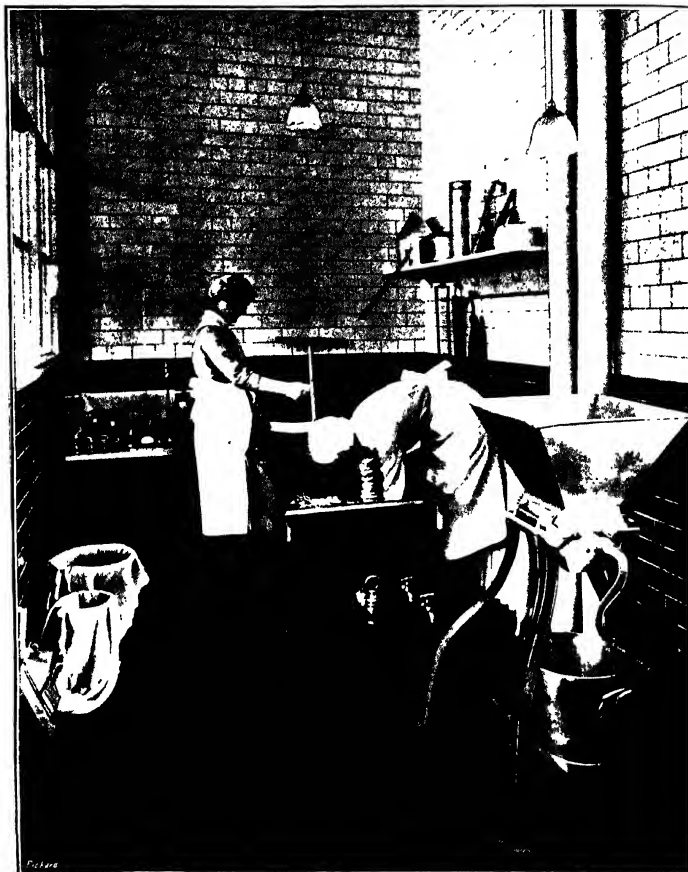
MILK DEPOT. BUTTER MAKING.

regardless of cost, as we should a military invader, we not only permit him to exact an infinitely greater, because constant, toll of life, but actually uphold immense police forces and erect and maintain expensive institutions in which to relieve him of the human wreckage he has wrought. When his victims can no longer support themselves, but need both maintenance and medical ministrations, we take them off his hands that he may be free to continue his death-dealing campaign against both our fellow-citizens and the State. Nay, we go further and put the frailest members of society into well-defined areas, in order that he may train his heavy artillery more effectively upon them, and if anybody complains we say, in effect, it is the fault of the weak that they are unable to resist the attacks of the strong, and that just as the enemy has the right to disable them, we have the duty to take care of them *after* the crime has been committed. That is how our conception of fair play all round works out : it gives the enemy a chance to manufacture, and then destroy, our weakest members ; it gives them a chance of being destroyed, and us a chance of providing for them as soon as he has converted them into casualties, so that justice is satisfied, and none but croakers and cranks complain. Talk about the declining birth-rate, infant mortality, and the damage rate ; it would be as easy for the Local Government Board and the authorities through which it works, to empty the Thames with a pail as to solve these stupendous problems

by any means that have yet been attempted.

Our culpable apathy has become part of our lives, and we resolutely decline to grapple with vested interests and the curses they inflict upon us until stern necessity compels us to act. Then, when our blind eye fails us, we begin to talk about the peril that ignored idealists and dreamers have been calling our attention to all along, as though it had only just been discovered.

In these times, when the soul should be stirred to its depths, the supreme duty of the whole community is to get back to God in order that the nation may consecrate its life to worthier objects and nobler living, and it would be well for religious organizations engaged in the production of neutral tints, and diplomatic ambiguities to clear the ground they cumber, for a world that has been thrown into the melting-pot has no use for moral and spiritual ineffectiveness. It must rely upon those who intend to play a man's full part in re-shaping it when it comes out again. The Churches that depend upon the support of men and women who are resolved to vindicate by the creation of a better world the appalling sacrifice of those who have died for their country's freedom and future, will not be slow to recognize that the nation cannot be saved by pleasant platitudes about Christian unity and "overlapping." Earnest men and women are sick of those who obviously attach more importance to organizations than to the purposes for which they were called into being. If the representa-



MILK DEPOT. CHEESE MAKING.

tives of the Churches had been in dead earnest they would long since have inaugurated the one and abolished the other, and the fact that they either lack, or refuse to use, the power necessary proves how unlikely they are to accomplish the infinitely greater task of translating abstract faith into concrete practice. In these circumstances it is very much open to doubt whether Churches, as at present constituted, will not die a natural death and be superseded by a new witness inspired by the great epoch of reconstruction that confronts us, and the necessity for its stupendous enterprises being carried through in that devoted and indomitable spirit which alone can extract from the world-wide disaster of blood and tears a new and glorious birth. Christianity is too universal in its appeal, and too democratic in its application, to leave the slums and their causes on a siding. Whoever heard of a great organization of suburban Churches called into being for the specific purpose of wiping out these plague-spots of the State and saving those who, under normal conditions, die in them in greater numbers than our heroes on the battlefield. It is no exaggeration to say that many of the wealthy and influential members of such Churches know infinitely more about foreign countries than about the poorer portions of their own, and are consequently alarmed when any one breathes the word revolution; but those in closest contact with the condition of the disinherited, can only wonder at their submission and

the fact that rebellion has been kept at arm's length so long. Organized religion has done little indeed to appreciate and remove the causes from which anarchy springs, although its highest duty is to transform the grossly selfish and contented materialism that dominates us, into applied Christianity.

In the tremendously realistic life of to-morrow, the Church's success or failure will depend, not upon the degree of comfort and contentment within its walls, but upon the manner in which it "sticks its claws into reality" by promoting creditable conditions outside, and exhibiting that consecrated enterprise among the poor which is the visible manifestation of the kingdom of God on earth. A sceptical world rightly wants to know what is happening to the man going down from Jerusalem to Jericho; and if the investigation shows that history is repeating itself, that the despised Samaritan is ministering to the victim's social and industrial needs while the official representatives of organized religion and respectable society are "passing by on the other side," it will judge their faith by their works and transfer its allegiance to those, however unorthodox, who are actually doing the spade-work of redemption. The truth of this statement has never been more strikingly borne out than by the universal appreciation expressed by our fighting forces—composed of all sorts and conditions of men—for the truly magnificent services rendered by the Y.M.C.A.,

both in the camps at home and on the battle-fields abroad. A more inspiring example of the wonderful power of real, solid, all-round Christian brotherhood, extended indiscriminately to good, bad, and indifferent alike—often in the very jaws of death—it is impossible for men to conceive or the Churches to copy, and to the rough-and-tumble Englishman's credit be it said that, whatever may have been the position of the Y.M.C.A. in this country before the war, it will occupy an honoured and impregnable one after it is over. When the Christian faith lacks vitalizing expression it becomes meaningless to living men, amongst whom actions are the interpreters of words. If organized religion would take off its coat and roll up its shirt sleeves in the slums of Britain, as the Y.M.C.A. has done on the threshold of hell in France, both the country and the Churches would be saved. The outstanding need is not talk but work, concentrated on the definite application of Christian principles to the circumstances of the times in which we live. Unfortunately the heart-breaking calls of poverty, ignorance and sin, have found the Churches much more willing to preach than to practise. That is how General Booth and his heroically devoted but deplorably equipped soldiers came to volunteer for this—humanly speaking—thankless task, in unknown and uncared-for hinterlands, while the Churches continued the much more congenial work that could be done in safety and comfort at home. Before organized

religion can play its part in the great schemes of reconstruction immediately before us it will have to win a reputation, for what the Americans call a "square deal." Its achievements must be such as to satisfy men that it stands four square to every evil wind that blows, removes injustice, redresses wrong and helps them according to the measure of their need. The relative disproportion between the number of places of worship in the slums—where the birth-rate and the death-rate are highest—and in the suburbs—where the duty of maintaining the one is increasingly ignored and the causes of the other are reduced to a minimum—is a fairly reliable index of the distance the Church must travel before it convinces disinterested observers that it sets as much store on the bodies and souls of the submerged as upon those of the well-to-do. An allegory may be forgiven. A wealthy and influential man went to Heaven and was met at the gates by Peter, whose duty it was to show him to his new quarters. As they passed through very beautiful country, the new-comer's attention was arrested by a pretty villa on the slopes of a hillside. "That's a bonny spot," said the stranger. "Who lives there?" "Oh!" said Peter, "the railway porter you used to see at the station every morning on your way to business." "Indeed?" was the surprised answer, and the journey was continued. One truly fascinating scene succeeded another till the new resident's delighted eyes fell upon a charming home nestling in a wooded valley.



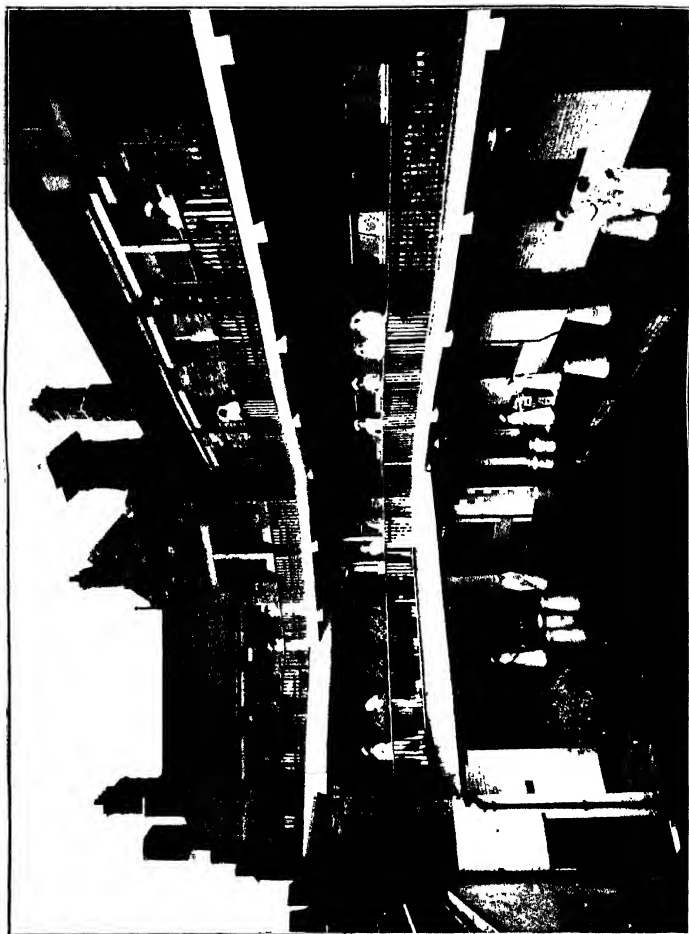
“ What a picture,” said the wealthy man. “ Whoever lives there ? ” “ That,” said Peter, “ is the house of that hard-working man whose wife and children were always so clean and tidy when they passed you on your way to church each Sunday.” “ Really,” said the bewildered stranger, and they passed on. Eventually they arrived at the edge of a bleak, desolate, and forbidding expanse of moorland with nothing but a few unshapely pieces of timber lying about. “ My word,” said the new-comer, “ I don’t care for the look of this place. I wouldn’t like to live here.” “ But,” said Peter, “ these are your new quarters.” “ What ! ” said the amazed citizen, “ I can’t stay here ; besides, there’s nothing but a number of old planks to be seen.” “ Well,” said Peter, “ *I’m sorry, but we can only use such material as you send up.*”

Settlements, schools for mothers, and similar institutions, will never get close enough to this problem of regeneration until they are transferred to the actual homes of the people they serve. What is needed is at least one house, composed of two or three dwellings, in the very heart of every slum, staffed by relays of, say, half-a-dozen Christian men and women blessed with wholesome every day common sense, who would be willing to live there a month at a time for the specific purpose of exhibiting, not ostentatious, but intelligent, tactful and sympathetic neighbourliness. That would be getting to know at first hand *who the poor are, and how they live,*

Reading books, listening to sermons, and hearing addresses make but a very superficial and easily removed impression ; actual experience on the spot would be cumulative and indelible, would put an end to flippant and uninformed condemnation of the poor, and would be as amazingly fruitful in educational results to the new-comers as redemptive to the old inhabitants. The task is as difficult as the opportunity is great. It needs undying faith in human derelicts, unquenchable enthusiasm and the Divine dynamic.

Rents are as outrageously high in slums, as the miserably inadequate accommodation provided ; while food is dear, owing to the poor-ness of its quality and the small quantities in which it has to be bought. Wages fluctuate between a comparatively low standard and nothing at all ; the public-house is the brightest place and the worst enemy, with which these sorely tempted people have to contend.

When to these conditions are added the helplessness of ignorance and the power of bad habits some idea may be formed of the work and the Herculean tasks that only God-directed volunteers can hope to perform. Yet it would be a libel on the people themselves to omit to point out that the kindness of the poor to the poor is one of the miracles of poverty, and that in the aggregate they are much more sinned against than sinning. The need is for optimism, sunshine and hope ; for men and women with initiative, resource and adaptability to go into these houses—they cannot truth-



fully be called homes—set to work, and in the light of their own experience, and the almost total lack of facilities available, demonstrate on the spot how to make the best of such heart-breaking conditions.

To do that, and at the same time lead these social outcasts to look to, and rely upon, a Power outside of, and greater than their own, would be to fulfil the Master's injunction. Indeed, it is impossible to picture what the redeeming presence of such good Samaritans would mean to people who have been neglected and despised until they ask only to be let alone.

A story-telling night once or twice a week would be like Heaven to the little urchins who in the meantime must look for their pleasures in foul gutters and filthy back-yards. An occasional cup of tea in the same place, a common-sense solving of difficulties, bright advice and cheery inspiration would be like the dawn of a new day to tired mothers struggling with adversity and sickly infants.

Ultimately the men folk might be induced to try an evening at the new home, where wisely directed social intercourse, vocal and instrumental music, stirring recitals, and other forms of elevating entertainment would enable them to compare results with the pleasures of the "Blue Lion" or the "Spotted Ox." The very presence of such kindly neighbours would create an atmosphere that gives strength to weakness and encourages failure to try again. But it would do more, for it is in

these very places that a rapidly increasing proportion of the next generation is being born, and unless they can be rescued the day of retribution and suffering is sure to overtake us. It is work that "blesses him that gives, and him that takes," and if the best men and women in the Churches would lay hold of it with devoted enthusiasm, organized religion would be converted from an innocuous profession into a magnetic and vitalizing Christian force. Is there heroism enough to build these lighthouses in the storm-tossed seas?

It is no answer to say that the Churches have established a mission centre here and there—for it is common knowledge that these are infinitesimal to the need, while in the better districts of cities overlapping is disgracefully prevalent; that they occasionally refer to the soul-destroying conditions of these human scrap-heaps when preaching; and now and again their representatives speak at public meetings to people who, whilst listening, get an uncomfortable sort of feeling that perhaps, after all, there may be something wrong, and then go home and sleep it off. Unless the terribly significant parable of the Last Judgment is to find an even more appropriate setting in the twentieth century than in the first, the Churches will have to march into the front line trenches of these under-worlds of iniquity, injustice, and want; and, when the moment comes to advance against the systems and interests responsible for

them, " go over the top " like men, to death or victory. The stay-at-homes are suffering from the creeping paralysis of unconscious indifference, and nothing can stop the progressive character of their disease but following the example of the Salvation Army, and actually *living* among the outcasts of humanity, that the legal crimes which society perpetrates upon its defenceless members may be burned into their very souls and arouse their righteous indignation, till they cry with Ebenezer Elliott—

When wilt Thou save the people ?

O God of mercy, when ?

The people, Lord, the people,

Not thrones and crowns, but men :

God save the people ; Thine they are,

Thy children, as Thine angels fair ;

From vice, oppression and despair,

God save the people.

That human and poignant petition, which should find a response in every Christian heart, imposes upon those who either utter or sing it the obligation to become the instruments by means of which God can answer it. Are the Churches willing to go and learn, through actual contact and painful experience, how those for whom Christ died exist—for they cannot be said to live, even in the richest country in the world—and then to make the land ring with an irresistible demand that these skeletons in the cupboard, these handwritings on the wall of " Christian " Britain, shall be swept out of existence and never again be permitted to become the

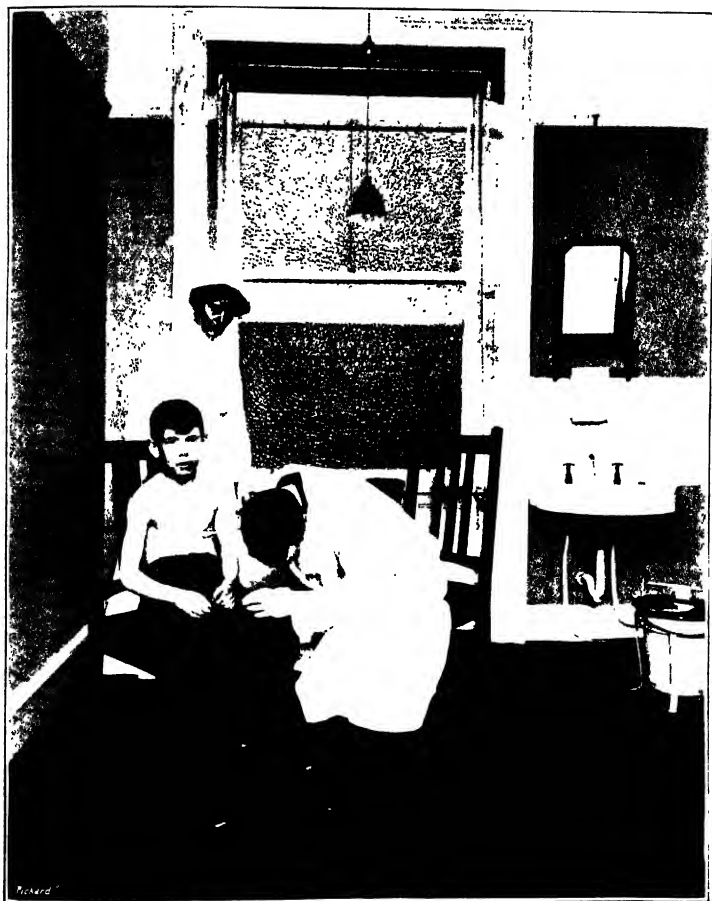
habitation of those—among others—who have stood between us and disaster ?

It would be a national crime to let the men who have fought our battles and won our victories go back to such hovels. Will the Churches add lustre to this epoch making period of heroism and sacrifice by undertaking in God's name that this shall not be. Are they the medium through which the omnipotent dynamic can be applied to the ever-increasingly complex problems that threaten the very life of the race ? Have their millions of adherents sufficient faith in God to undertake the world's reconstruction in the spirit of Christ ?

Churches and slums are manifestly an impossible combination—either may flourish, but both cannot, for the one is the antithesis and negation of the other—and a nation passing through the throes of a new birth will have to decide which.

Why cannot the Churches treat Christianity as the great redeeming fact that it is, rivet men's attention on its results, and, by applying it to their material needs, prove its utilitarian value for workaday life ?

A religious revival in this country can only come through the salvation of the mother and the child, the abolition of slums, and the causes that produce and maintain them. If the Churches can do that they will be saved ; but, if not, they neither will, nor deserve to be, for they will prove themselves the betrayers of Him who taught men to pray "Thy Kingdom come. Thy will be done in earth, as it is in Heaven".



CHILDREN'S CLINIC. MEDICAL CONSULTATION

CHAPTER XII

THE BRADFORD SCHEME

THE Bradford Maternity and Child Welfare Scheme was inaugurated on June 17, 1912, by the taking over of four voluntary institutions known as "Babies' Welcomes."

Any attempt to give more than a general idea of its scope and character must necessarily be a limited one, but it is hoped that the illustrations will help to fill in the description and explanations.

The object of the scheme is not to promote the education but the health of children; but as health is the condition of success in education and in every other activity, it must, apart from the child's own well-being, prove an immense advantage to the education authority to have provided a steadily increasing stream of children physically fitted to receive and profit by the instruction given in the schools.

The expenditure involved, though large, is the most remunerative investment that a local authority can possibly make. Fortunately circumstances are at last compelling a revaluation of the things that matter; the public conscience is beginning to realize that if any apology is called

for it must be tendered not by those responsible for something being done but by those who in permitting life to be sacrificed to money, have allowed the work before us to become so urgent.

Apart from the cost of food—a question now approaching settlement—and expenditure on the Milk Depôt, the Local Government Board contributes in the form of grant one-half the cost of administering the scheme, the whole of which cost is controlled by the Health Committee of the Corporation, and imposes a net outlay of some £13,000 a year or 2*d.* in the pound on the rates of the city.¹

ANTE-NATAL SUPERVISION

We begin to work out the scheme with a Department for Municipal Midwives, which now includes twelve fully trained and certified women. They have been allocated to districts where the service was inadequate or where a previous midwife had been removed from the roll for dereliction of duty, and it is intended

¹ The net cost of £13,000 per annum includes £9,000 for food which, though not relief but treatment, the Local Government Board has up to recently declined to recognize. This has been true even in the case of meals that must be given to women in the Maternity Home and to infants who are patients in the Hospital. How these were expected to live without food is not very obvious, but a grant for it was denied. At the Feeding Centres, where expectant and nursing mothers are fed, suitable meals are also supplied on the same condition to children attending the Pre-School Clinic, so that that part of the treatment is, where necessary, continuous from infancy to school age, after which the feeding is authorized by Act of Parliament.



CHILDREN'S CLINIC TREATMENT ROOM.

to extend the service as opportunity affords till it embraces the whole city and meets the needs of all its inhabitants. They are paid a minimum pre-war rate of £80 per annum with uniform and travelling expenses, and the salary increases when the practice exceeds a given number of cases. They are a recognized and important part of the complete and co-ordinated scheme for maternity and child welfare and are required to keep in the closest possible touch with the ante-natal work being done under the scheme and all the medical assistance they need is provided for them. In this way a very practical step has been taken which secures voluntary notification of pregnancy, miscarriages and still-births, and by improving the health of the expectant mother increases the vitality and strength of the child when born.

In furtherance of this work an Ante-Natal Clinic was opened in 1915. This clinic consists of a suitable waiting-room and a well-equipped consulting-room, where medical advice is available on all matters relating to expectant motherhood. If operative treatment be prescribed, such cases are provided for at one of the Municipal Hospitals. Immediately adjoining the Clinic is the Maternity Home—the first municipal institution of its kind in the kingdom. The equipping and staffing of this institution are thoroughly up-to-date; there are twenty beds, two labour rooms and an excellent operating-theatre.

The Home is primarily intended for cases where (1) difficulties are anticipated at birth, (2) where these arise after birth, and (3) where the patient's home is unsuitable for the confinement. Those familiar with the character of many working-class homes will realize how large class 3 is, and they will not be surprised to learn that it was soon found necessary to double the accommodation.

Patients entering the Home pay a fee of 10s. with the addition of 2s. a day for residence, thus enabling the mother to estimate the limit of her financial responsibility. To let a poor woman know that she is cared for and that *her* child is the object of all that medical skill and kindly consideration can give is to bring a new inspiration into her life. It is interesting to see with what gratitude and pride mothers come back to the institution to demonstrate by the actual condition of their children the fidelity with which they have carried out the instructions given and the happy results that have accrued.

THE INFANTS' DEPARTMENT

The Infants' Department, a three-story building, is at present unique in this country. Its clinic on the first floor consists of waiting, dressing, weighing and recording rooms, doctor's consulting rooms, an isolation room and a dispensary. The staff of forty includes three whole-time women doctors, a qualified dispenser, and an adequate

number of nurses and assistants. The infant is carefully examined by the doctor on its first visit, and thereafter periodically, which ensures the early detection of any abnormality in development or sign of disease. Special attention is given to the vital question of nutrition, to the instruction of nursing mothers and the investigation and supervision of all factors connected with lactation; and explanations as to the preparation of the food prescribed for bottle-fed babies (accompanied often by demonstrations) occupies a large part of the time of the staff. No attempt has been made to give instruction to mothers in classes, because if the instruction is to be really helpful it must be individual and practical. This is the method adopted at the Clinic, and it has been found to secure the personal interest of the parent with eminently satisfactory results.

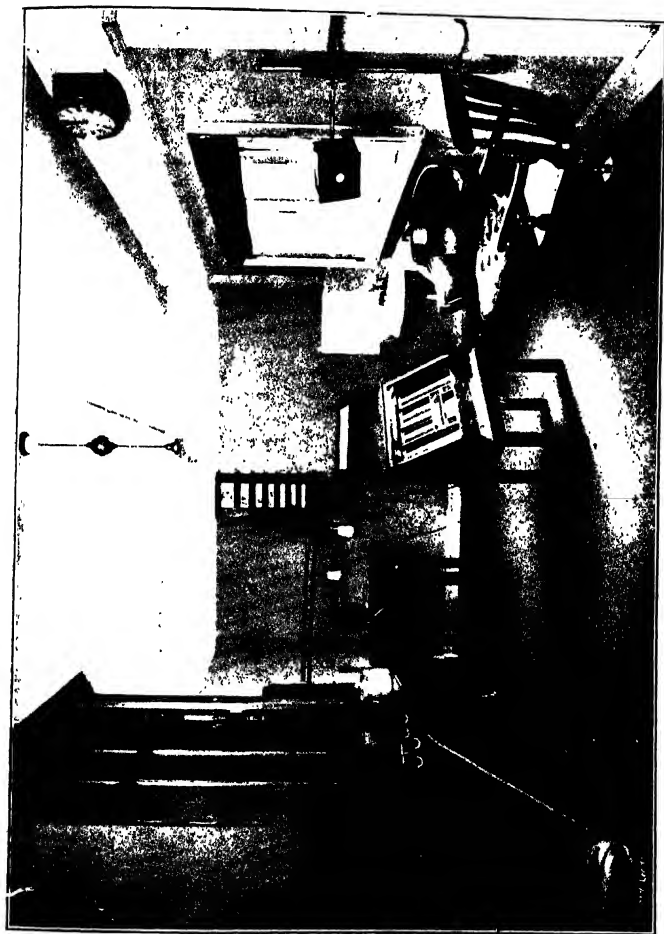
The necessary treatment of the infants is undertaken in a room set apart for the purpose, and a very helpful system exists of lending to necessitous mothers such requisite appliances as ear syringes, etc. Drugs are prescribed, if necessary, but the treatment required is found to be very largely dietetic and hygienic. Over 600 babies attend weekly in normal times, and in view of the fact that about half the infants are found on registration to be suffering from some disease or defect (frequently unrecognized by the mother) the necessity of the supervision is obvious. A special effort is made to secure the attendance of infants

as soon as possible after birth, and while healthy, for prevention rather than cure is the keynote of the work.

Infant ailments are rife, and little lives are lost, not because of natural unfitness or lack of affection on the part of the mother, but primarily because of the adverse environment in which both child and mother have too often been born and brought up. The Clinic comes to the rescue in these cases. Here the baby is under the care of a doctor and nurses who have a thorough knowledge of its history (many of the record cards supply the most complete life-histories of the first year) and who also know the history of the mother, the home conditions and financial resources. But when the Clinic has done all it can do, more remains to be done.

The work is followed up by kindly supervision in the home itself by women health visitors. The purpose of all this is not to destroy home life nor to attempt to find a substitute for parental care, but by timely helpfulness to strengthen these indispensable influences.

There are unmistakable proofs of the humanizing power of the work. When another little mouth enters a home already poor and the careworn and anxious mother takes her infant for the first time to the Clinic, a wonderful thing not infrequently happens. The mother sees fully qualified doctors and well-trained nurses taking an intense interest in the child that circumstances had led her to regard rather as a burden



CHILDREN'S CLINIC EYE CONSULTING ROOM

than a blessing. A revelation enters her life and new love flows from her heart. If these strangers care for her child, if its well-being really matters to them, it must mean something to her; she leaves the building with a treasure she did not bring, and goes down the street a different woman.

Situated over the Clinic is the Infants' Hospital (with Open Air Balcony), containing twenty beds, which it is hoped to extend to forty.

The Hospital is devoted to the treatment of babies suffering from malnutrition of that severe kind which is frequently complicated by other troubles. No infectious cases are admitted. If the infant is too ill to be treated at the Clinic, or the home is unfit for its proper care, an offer is made to take it inside. The curative results of this method of treatment are wonderful, alike in their completeness and their rapidity, and from the very first have more than justified the novel step of establishing a municipal infants' hospital.

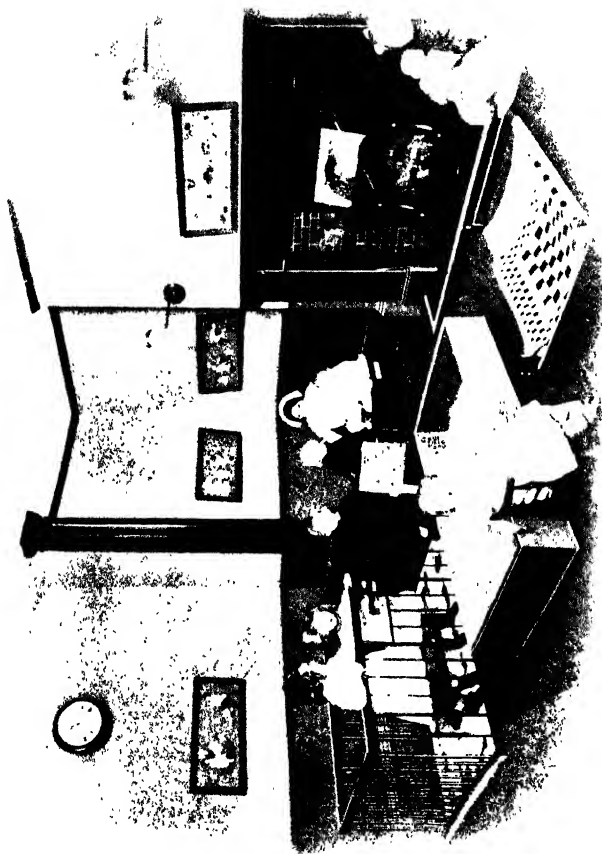
District Clinics are being provided for the convenience of mothers who live some distance from the central institution. Here supervision of healthy infants is undertaken, but all serious matters are referred to the centre.

MILK DEPÔT

On the ground floor of the Infants' Department is the Milk Dépôt, which supplies a number of public institutions, including the hospital, sanatoria, school feeding centres, and the cooking

kitchens in which meals for expectant and nursing mothers are prepared. The demand from these institutions is necessarily subject to considerable fluctuation. As the school feeding centres and those for expectant and nursing mothers are only open on five working days of the week, some portion of the milk delivered at the Depôt on Saturdays, Sundays and to a lesser degree on holidays, constitutes a surplus, which is converted on the premises into cream, butter and cheese for the use of such Health Committee institutions as have just been mentioned, where, on the average, 800 to 1000 persons (patients and staff) are boarded daily. Adjoining the Depôt is the Infants' Milk Laboratory, which works in conjunction with the Infants' Department.

The breast feeding of all infants, however desirable, cannot be ensured at present, in cities where child-bearing women have to work in factories. Consequently, if the inevitable bottle-fed babies are not to be abandoned to the perils of inexpert hand-feeding, it was necessary to provide for them a food as suitable as medical science can suggest. For each such infant, therefore, the medical staff prescribes the food best adapted to its individual needs, and the prescription is modified from time to time in accordance with requirements. Milk preparations, dispensed in the Milk Laboratory, are sent to the homes in special bottles sealed with aluminium discs; each containing a sufficient supply for one meal. The bottle can be fitted directly with a suitable rubber



INFANTS' AND PRESCHOOL CLINICS CRÛCHE.

teat which can easily be cleansed by the mother.

The educational value of the work in these institutions is shown in a growing recognition of the fact that the care of infancy is an important field for specialized work and rightly demands special equipment on the part of those engaged in it. Speaking of this Department Mr. Herbert Samuel—when President of the Local Government Board—said:

I do not think I have ever seen any institution in any town or any country which struck me in a greater degree as being well-devised, admirably organized, and urgently needed by the population whom it serves.

Before passing to deal with other features of the scheme it is fitting that a tribute should be paid to the enterprising band of social workers who for some time voluntarily conducted the four institutions known as “Babies’ Welcomes,” and thus, unknowingly perhaps, laid the foundations for the comprehensive structure which has grown up under municipal auspices.

COOKING DEPÔT

While everything possible is done where artificial food is inevitable, the goal ever kept in view is breast feeding. Advice, therefore, has been supplemented by meals, for in many of the poorer homes malnutrition in the mother is the unmistakable cause of failure of breast-milk for the child.

A Cooking Dépôt has been established where wholesome and suitable food is prepared on the

first five days of each working week and then sent in heat-proof vessels by motor vans to eight feeding centres, where in pre-war times some 500 expectant and nursing mothers were fed, the meals being served by ladies, who constitute the only voluntary workers associated with the scheme. These meals must not be confused with relief, for they are essentially medical treatment given primarily in the interests of the baby to be born or the child that has already arrived.

Every reasonable precaution is taken to prevent abuse where food is given either to mothers or children. The family income is first ascertained in an entirely separate department, then checked, after which each case entitled to consideration is submitted to a small sub-committee of the Health Committee, who adopted an economic standard before the war of an income not exceeding three shillings per head per week after the rent of the house had been paid. Since the war the standard has been raised to six shillings per head. Where the income is over six shillings per head, but does not exceed six shillings and sixpence, the recipient pays twenty-five per cent. of the cost of the food ; where it is over six shillings and sixpence, but does not exceed seven shillings, the recipient pays fifty per cent. of the cost. This is of necessity subject to wide discretion, for the economic position of such families is constantly varying and must be periodically reviewed in order that readjustments may be made to meet the ever-changing circum-



CHILDREN'S SPECIAL HOSPITAL. WAITING ROOM.

stances. In addition, where the woman is an expectant mother she must visit the ante-natal Clinic for advice, while when she becomes a nursing mother she must take her child regularly to the Infants' Department in order that it may be supervised ; and both before and after the birth of the child she must take not fewer than four dinners a week at the feeding centre, where registers of attendance are kept. This co-ordinates the scheme, enables the supply of breast milk to be carefully and scientifically observed and the effect of the feeding on the nutrition of the infant to be medically noted. It prevents slackness keeps the mothers alive to the importance of their task, and gives a serious aspect to the work generally. The effects of the dinners are not only shown in physical benefit ; the women gradually develop a higher regard for personal cleanliness, tidiness of dress, good manners and thought for others ; qualities which must in turn react upon the homes from which the mothers come.

Cookery demonstrations are also given at each centre where expectant and nursing mothers are fed. This is an attempt to give those upon whom the stress of economic circumstances is greatest some help in domestic training to meet their difficulties. Such a task necessarily needs not only a knowledge of food values, preparation and cooking, but an intimate acquaintance with the home conditions, lack of cooking utensils, and the general absence of reasonable facilities for the

fulfilment of domestic duties with which these poor women are beset. The demonstrations have been specially adapted to meet the local needs, and are confined to simple household cooking within the reach of those who attend, and all the women in the neighbourhood are urged to do so. Each lecture is a homely talk which elicits sustained interest and frequent questions. The mothers see the raw material, its preparation and cooking, and the dishes are afterwards distributed among them in order that they may satisfy themselves as to the result, and know beforehand what should be expected when the same thing is attempted in their own homes. The unconventional character of the proceedings is maintained by a friendly cup of tea at the close of each demonstration, which has an average attendance of fifty.

It has already been mentioned that the Local Government Board contributes one-half the cost of the administration of the whole scheme, exclusive of the Milk Dépôt and of the cost of food, and that the question of meals is at last being dealt with for this method of treatment is indispensable to child welfare. Indeed if the meals were served in bottles labelled with Latin inscriptions, instead of on plates, no one would dream of questioning their medicinal value. In the circumstances wholesome food is the only common-sense treatment that can be prescribed, and it is all to the good that the method of administering it blesses two lives instead of one.



CHILDREN'S SPECIAL HOSPITAL, MEDICAL CONSULTATION.

Parliament, in the interests of education, has had the moral courage to recognize the wisdom of giving relief necessitated by economic stress. It has legalized the feeding of school children, and the Board of Education has persuaded the Treasury to grant one-half the cost. This being so it was inconceivable that Treasury funds would not be forthcoming to enable the Local Government Board to offer local authorities at least a corresponding contribution towards the cost of meals for poor expectant and nursing mothers, which is a most hopeful part of maternity and child welfare work. Few thoughtful people would deny that the Health Committee's claim for a grant in respect of these meals rested upon even higher ground than that for which the school meals grant is given.

To surround hungry mothers with dispensaries instead of kitchens, and to treat children suffering from malnutrition with drugs instead of life-giving food suited to their condition—which was plainly the meaning of the restriction of grants to curative treatment—is to approach the scheme without judgment, imagination or vision. In this connexion it will be well to remember that although school meals were legalized before school clinics, it was in consequence of the medical inspection of school children that education authorities throughout the country were gradually compelled to recognize the wisdom of giving school meals.

Yet the obsession in favour of curing, rather

than preventing, is wonderfully hard to exorcise. How willingly we contribute both taxes and rates to the benevolent purpose of keeping human medicine chests trudging wearily towards the grave ; and with what holy horror and worldly apprehension we approach the very thought of our money being spent on food for rearing healthy and helpful citizens. It is true the efficacy of the new method of treatment has already been demonstrated in Bradford, for there are women who before this institution of the meals never had a living child, and others who are now able to suckle their infants for the first time.

Perhaps it was all a mistake—better to have dead bairns than free meals, weakly and artificially fed infants than strong ones nourished at their mother's breast through the aid of Government grants ? This subtle question of the treatment that ought to be meted out to " other people's " offspring will be best determined when we are fascinated by the cooing of our own ; or when, sitting in our comfortable pews, we hear the children's charter from Him who rebuked his disciples in the old days for the very indifference of which His followers in these newer days are guilty. It was He who made maternity and child welfare schemes possible when He said—
" Suffer little children and forbid them not, to come unto me, for of such is the kingdom of Heaven."

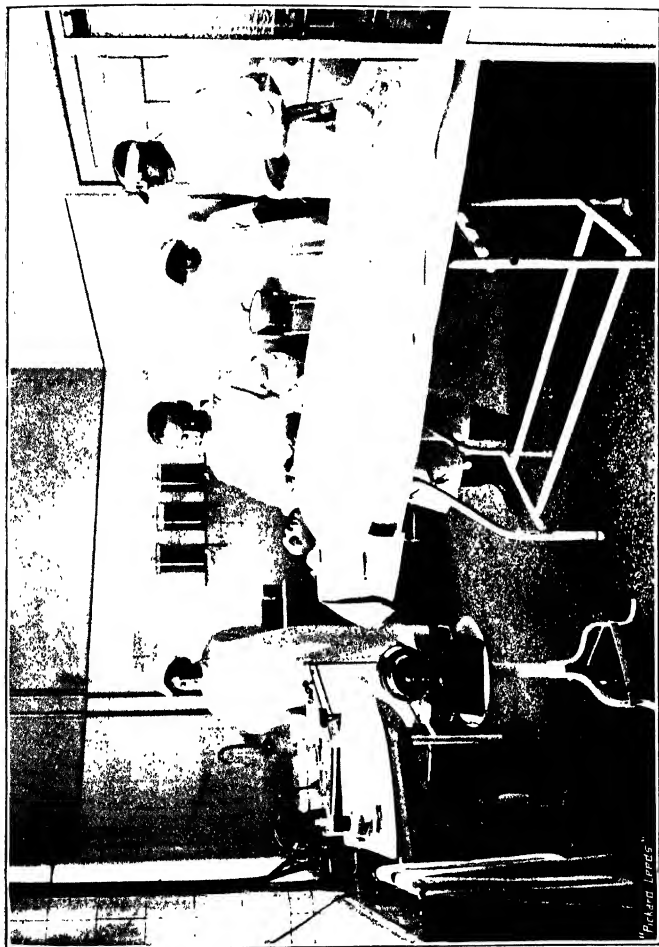
PRE-SCHOOL CLINIC

Hitherto there has been a serious gap between infancy and school age in which the good results secured during the earlier period have often been undermined, if not actually lost. In Bradford this important gulf is bridged by the Pre-School or Children's Clinic, where the medical inspection and treatment previously carried out by the Infants' Department is continued until the child passes into the care of the Education Committee, for whom it is hoped to raise the general standard of health of school children.

Each age period in a child's life has its own peculiar physical conditions and dangers, and it would be folly to attend to the one and ignore the other. Between the ages of one and five years the child begins to develop its special senses and requires the most careful supervision alike from the standpoints of prevention and defect. Undue tax may be put upon an organ delayed in development ; non-notifiable infectious diseases and the serious troubles which often arise from them have to be provided against ; surgical tuberculosis is liable to develop and nutritional disorders to recur. It is for the avoidance of these dangers that the pre-school clinic has been called into being. The staff consists of two doctors aided by such expert advice as may be required, and four fully-trained nurses.

THE EYE DEPARTMENT

The eye is a sensitive and delicately adjusted organ which only reaches full development after a long process of evolution. The infant gazes afar off because its eyes are not focussed to the things around it. No definite rule can be laid down as to the time that will be taken to adjust this condition, but in most cases it will be prior to the fifth year. It frequently happens, however, that children of four or five years show a slight but appreciable deviation from the normal, which would nevertheless disappear if the eyes were left to develop without strain. It is, therefore, now recognized that anything in the nature of minute eye work cannot be undertaken by young children without endangering their sight, and in consequence the general system of education has been greatly modified. But the condition of the eyes and not the age of the child is the main factor in determining the amount and character of the work that should be undertaken. Failure to appreciate this fact has led to a very large amount of serious eye defect among school children, estimated at from 10 per cent. to 20 per cent., about half of whom are in urgent need of treatment. Many of these defects have clearly had their beginnings in early childhood, and some may have arisen from simple delay in normal development. It is, therefore, supremely important that children's eyes should be scientifically examined and, where necessary, carefully adjusted, before school age is reached. With this object



CHILDREN'S SPECIAL HOSPITAL. OPERATING THEATRE.

in view, a well-equipped eye department has been fitted up at the Pre-school Clinic and is under the care of a fully trained, experienced, and painstaking oculist.

THE CRËCHE

Mothers with two or three young children and no domestic help or kindly neighbour available, would often find it exceedingly difficult, and at times impossible, to leave their homes for the purpose of visiting the Infants' Department or Pre-School Clinic, unless they could bring with them, not only the child actually needing the doctor's advice, but also the other little members of the family. On the other hand, if the latter were allowed, either to run about the Departments, or prevent the mother giving undivided attention to the members of the staff who were trying to help her and her child, the work would be seriously interfered with and its value undermined. Consequently an attractively furnished Crèche has been opened, which adjoins the Clinics, and is under experienced supervision ; here the surplus number of budding citizens may be left from the time of the mother's arrival till she is ready to go home again, a provision which is greatly appreciated and enables the routine work to be carried on much more quietly and effectively than would otherwise be possible.

DEPARTMENTAL CONFUSION.

Up to this point, the Municipality has provided most of the medical care for the children, but a

point is now reached at which duplication of departmental work is inevitable.

The question is of such importance that it is advantageous to review the anomalies of the existing situation and, as Bradford circumstances illustrate the national difficulty, one may be forgiven for referring to them.

All honour is due to the Board of Education and the Education Committee for initiating the admirable work of school clinics and so paving the way for larger and more perfectly thought-out schemes of child welfare. As such schemes progress, a new and broader outlook reveals the defects inherent in the older system, and proves that overlapping, inefficiency and waste are inevitable so long as two separate committees are responsible for the medical supervision and treatment of the same children, in the same area, and out of the same purse.

Unless these two bodies confine themselves to their respective duties of health and education public well-being must be sacrificed to less desirable ends. If one medical officer is to be responsible for all the work, why confer upon him two titles—Medical Officer of Health and School Medical Officer—and allocate the supervision of the duties he discharges to two separate Committees? In Bradford the Health Committee, through the Medical Officer of Health, control the overwhelming proportion of the medical care and treatment of children, and such as remains for the School Clinic would be much more efficiently



CHILDREN'S SPECIAL HOSPITAL. OPHTHALMIA WARD.

Richard

done if it were transferred to the Health Committee. The wisdom of such a step was so apparent that both the Committees concerned and the City Council unanimously approved of an arrangement whereby the Health Committee were to do the work to the satisfaction of the Education Committee and the Board of Education and be paid the net cost. This common-sense and business-like agreement worked with perfect smoothness and complete success until the Education Department abruptly terminated it ; the plea put forward being that though the City Council was the Education Authority it had not the power, owing to administrative and legal difficulties, to manage its own internal affairs to the extent of entering into this mutually desirable and helpful arrangement.

Yet the Health Committee has a small hospital—which will be referred to later—dealing with more serious eye, ear, nose and throat troubles than those already mentioned, where 66 per cent. of the patients are school children whose treatment is undertaken on behalf of, and paid for by, the Education Committee. This with the knowledge and approval of the same Department in London which with typical inconsistency and obvious contradiction, flatly refused to allow the scheme to go forward ! The absurdity of the situation will be apparent when it is remembered that the Health Committee are responsible for the sanitation and hygiene of the homes of school children ; that two-thirds of the patients

entering the Fever Hospital are school children ; that at the Grassington Sanatorium fifty beds are provided for school children suffering from phthisis, and that at Bierley Hall Sanatorium accommodation is to be made for fifty cases of surgical tuberculosis in school children. In addition the Health Committee have brought into being the scheme which includes the Feeding of Expectant and Nursing Mothers, the Ante-Natal Clinic, the Maternity Home, the Infant Department, the Pre-School Clinic, the Special Hospital, the Post-School Clinic, and a staff of twenty women health visitors whose time is largely absorbed by child welfare work. One thing that stands outside this comprehensive and otherwise complete scheme is the relatively small undertaking of the School Clinic, which though appointed for education and not for health purposes is essentially a health and not an educational institution. As such it should be handed over to the committee responsible for public health, in order that the medical supervision and treatment of children may be carried on from the ante-natal period to insurance age without interruption, duplication, or loss. Now the local Education Committee propose to build, with the knowledge of the Government Department concerned, what for purposes of convenience is called a residential open-air school—an altogether excellent project, except that it will in reality be a sanatorium where only the smallest amount of education can possibly be given by reason of the fact that all the



CORNER OF ONE OF THE DENTAL CLINICS.

children will be sick. A large proportion of the children will be either pre-tuberculous or actually tuberculous, a class already provided for by the Health Committee at one or other of the Sanatoria previously referred to !

Another reform Bradford sought to bring about was the abolition of the needless, wasteful, and irritating duplication of inspectorial staffs which no commercial enterprise would ever have allowed to grow up. The Education Committee has school attendance officers dealing with sickness in children or slackness in parents, and school nurses visiting scholars who are ill ; while the Health Committee has health visitors attending to notification of births, tuberculosis, the maternity and child welfare scheme, overcrowding, uncleanness, etc., and sanitary inspectors supervising housing, sanitation and structural defects. These four sets of officials are employed by the one authority very largely to visit the same houses, whereas the duties of the first three, being kindred in character, could be discharged more effectively, and with less annoyance to the sadly over-inspected people concerned, by one. Nothing more than organizing ability and business aptitude are necessary to ensure that sanitary inspectors should concern themselves with structures and health visitors with occupants.

These illustrations are typical of what is going on in other cities and towns, and show the absence of clear thinking on the one hand, and the subordination of the public interest to departmental

feeling on the other. Surely the line of demarcation is unmistakably clear. Where education is the prime purpose to be served the work should belong to the Education Authorities, and where the ruling motive is health the task should be discharged by the Health Authorities, while the adjustment of the few exceptions to the rule should not surpass the wit of man if good feeling and sound judgment exist to meet them. But it is more than difficult to see by what process of reasoning, however subtle, education can be claimed as the real reason for detaining a child—outside a boarding-school or a residential blind school, where a child's education enters into every duty of its normal life—twenty-four hours a day.

Education has no doubt been far too narrowly interpreted in this country, but that does not justify the strenuous attempts now being made to embrace health problems in its name. Too far east is west. We began to feed school children not from the broad, humanitarian standpoint of communal responsibility for the health and well-being of the young, but because they were unable "to take advantage of the education provided" for them "by reason of lack of food." It is astonishing by what wonderfully circuitous routes the nation approaches most of its problems; nothing short of a European war seems able to induce it to throw off the dead hand of precedent and make its methods as elastic and adaptable as the people's needs. We muddle through civil affairs, as we are said to muddle through military



MATERNITY COOKING KITCHEN.

campaigns, the one consolation being that in spite of our contradictory and extravagant ways of doing things and the needless suffering and sacrifice involved we ultimately reach our goal.

It must of course be clearly understood that nothing is further from our minds than to deprecate any part of the excellent public health enterprises and institutions which are springing up in the name of education. On the contrary, as the Bradford Maternity and Child Welfare Scheme indicates, we are anxious to see them not only maintained but materially extended. If, however, the best results are to be secured, it is obvious that the work must be carried on by those who exist strictly and only for that purpose, and not by authorities called into being quite as definitely for the distinctive task of education, which is sufficiently important to absorb all their energy and enthusiasm.

The pioneer work in both public health and education has been done in large centres, and it may be objected that in small places there is considerable difficulty in securing sufficiently progressive local authorities for the discharge of these newer duties. This must be admitted. But the spirit and tendency of the times is undoubtedly to obtain efficiency by increasing the size of administrative areas and placing a larger responsibility upon the authorities. The difficulty, therefore, is surely receding; and just as surely there is coming a great national Public Health Department which will galvanize lethargic bodies

into activity. The logic of events must inevitably lead up to better things, for

‘New occasions teach new duties ;
Time makes ancient good uncouth ;
They must upward still and onward
Who would keep abreast of truth.’

POST-SCHOOL CLINIC

The Post-School Clinic is designed to link up school age and insurance age. The period of fourteen to sixteen years is one of transition from childhood to youth, from school life to working days, when such physical defects as anæmia, debility, early pulmonary tuberculosis, rheumatism and heart disease are liable to develop. It is a time of trial, when the severe tax of continuous manual labour and comparatively long hours is first encountered, and therefore calls for helpful oversight. By means of the Post-School Clinic it is hoped to form a junction with the medical work in connexion with factory employment, street trading and the like, and to continue the supervision and treatment which will then have been carried on from the ante-natal period without a break.

To meet the special difficulties arising in connexion with eye, ear, nose and throat, troubles which are prevalent in children of all ages, an entirely separate Department has been formed at the City Hospital. It consists of waiting-room, consulting-room, dispensary, operating theatre, and three wards with twenty beds. This institu-



MATERNITY COOKING KITCHEN

tion, which is believed to be a model of its kind, is under the care of a consulting surgeon, a resident doctor, and an efficient staff. In one of the wards cases of ophthalmia neonatorum are treated, a disease attacking the eyes of the newly born and said to be responsible for 75 per cent. of the cases of congenital blindness. Where indoor treatment is necessary the mother, as well as her child, is admitted, in order that the breast-feeding of the little patient may not be interfered with. So far the enterprise has been very successful, and has undoubtedly saved many children from the terrible affliction of blindness from birth. Bradford is believed to be the only municipal authority which has made such provision for these cases. In the other wards special diseases of the ear, deafness, adenoids, enlarged tonsils, etc., are dealt with, and the treatment often makes all the difference between a dull child and a bright one, a happy life and a miserable existence.

DENTAL DEPARTMENT

The value of a Dental Department in any efficient maternity and child welfare scheme needs no justification. Practical men and women appreciate whatever is calculated to modify or remove the disabilities handicapping those who have life in front of them.

Septic conditions of the mouth and teeth are now recognized as potent factors of ill-health and disease, particularly in the nursing mother and the child. Similarly, the provision of dinners

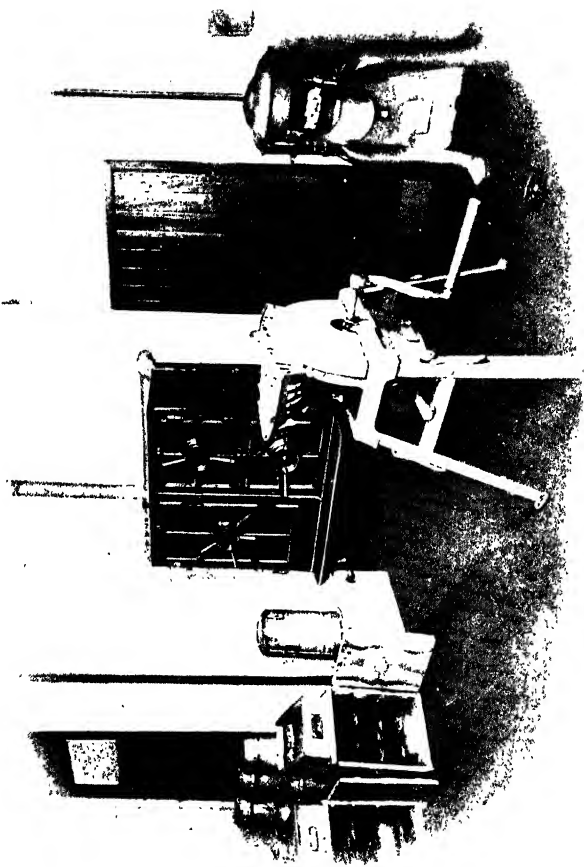
for such women is little better than wasted so long as the state of the mouth and teeth prevent digestion. In order, therefore, to enable nursing and expectant mothers to take full advantage of the meals provided for them, both at the Feeding Centres and at home, dental treatment has been added to the scheme, and a visit to the dentist to ensure that they have a wholesome and aseptic mouth is made a condition of attendance at the dining-rooms. The fact that young children's teeth are temporary has led, in far too many instances, to the erroneous assumption that they were of little importance ; it is necessary, however, to remember that they have to serve the child during a time of active growth and development for a period of seven to twelve years, and that their condition materially influences the permanent set that must follow.

The treatment is provided in fully-equipped clinics where irregularities are rectified and teeth stopped, but very rarely extracted.

It might, perhaps, be noted, though it does not directly belong to maternity and child welfare, that arrangements are being made for the treatment of both insured and non-insured tuberculous persons at this Department.

WOMEN HEALTH VISITORS

The connecting link between the institutions described and the public they are intended to serve is a staff of twenty women health visitors. These must possess not less than two certificates :



MATERNITY COOKING KITCHEN, THE ANNEXE.

nursing, midwifery, or sanitation. Their duties are to carry out the system of home visitation, including that under the Notification of Births Act (adopted in Bradford early in 1908), and their work consolidates the complete scheme by bringing the homes of the poorer section of the working classes into direct contact with every remedial agency. They try to induce mothers to take advantage of the help provided and follow up the advice given at the centres with that constant, cheery, and sympathetic oversight without which these sadly overburdened women would far more often grow weary in well-doing. We do well to remember, though we are singularly liable to forget, that those who have to bring up a family and discharge every domestic duty from the cradle to the grave with totally inadequate accommodation and amid soul-destroying surroundings, are tremendously handicapped in the struggle towards better things.

TRAINING FOR MATERNITY AND CHILD WELFARE

As the vital and complex problem of Maternity and Child Welfare increasingly impresses itself on the public mind, the indispensability of specialized training and the scarcity of thoroughly qualified women becomes painfully apparent. The comprehensive facilities provided by the Bradford Health Committee are so complete that nurses with actual experience at its Welfare Centres are in great request elsewhere and

applications for training are made by women from all parts of the country who are anxious to equip themselves to meet the growing demand.

For such women it was thought desirable—alike in their own interests and to relieve parents from anxiety—to provide a comfortable hostel where they might reside during their period of training.

At the Maternity Home, pupil nurses are received for training in ante-natal hygiene and midwifery, and in due course sit for the Certificate of the Central Midwives Board, while at the Infants' Department special courses are arranged for the training and certification, not only of probationer nurses in the Hospital, but of student nurses in the Institution, and to these it is hoped shortly to add the training of doctors: where the desire exists for taking the combined courses, facilities are provided accordingly.

Such, in its broad outlines, is the Bradford scheme. An essential feature is the careful compilation of records which are available for guidance as the child in its progress goes from one department to another. These records will also provide illuminating and suggestive data for future action.

From the beginning, the scheme has had to contend with ever-increasing war-time difficulties in which a steadily growing number of mothers have been induced to work in textile and munition factories, while many who have been unable to meet the enhanced cost of living—including some soldiers' dependents—have been compelled



EXPECTANT AND NURSING MOTHERS, FEEDING CENTRE.

to work in order to meet the increasing demands of the family budget. At the same time the benevolent sections of the community have been doing war work at high pressure; doctors have been going to the front in larger numbers, and those remaining behind have been compelled to neglect the children in order to attend to the adult population. The anguish of bereavement, the strain of anxiety, and the increasing recourse to drink amongst women have all prejudiced materially the vital work of maternity and child welfare.

CHAPTER XIII

THE AFTERMATH

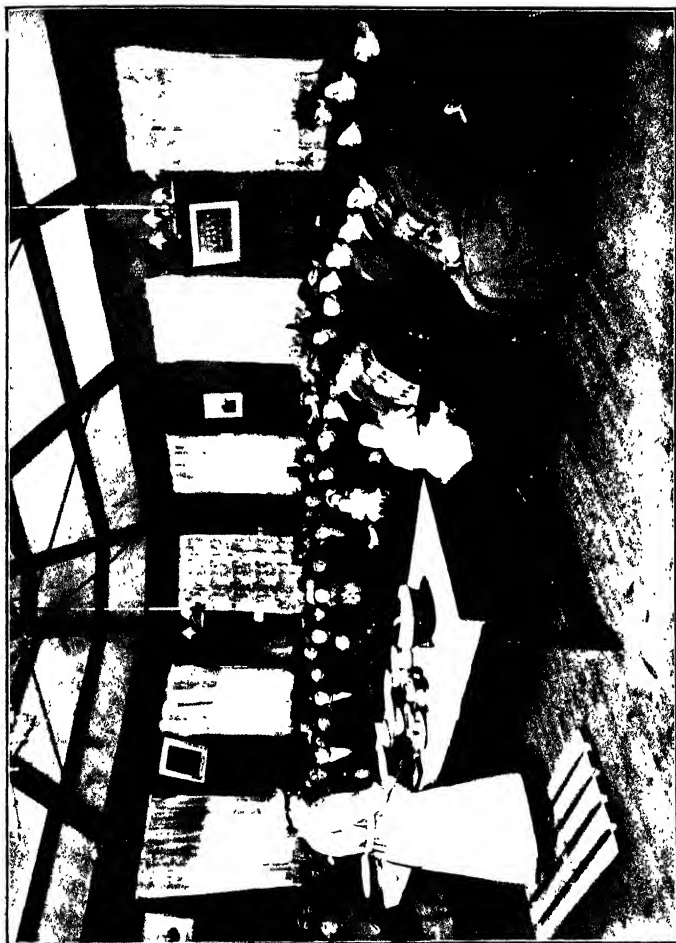
WE entered the war to discharge our obligation to Belgium. As often happens, the acceptance of one duty leads to the undertaking of another, in this instance one that is full of possibilities for universal blessing. Although the dehumanizing struggle has spread till it practically embraces the civilized world, what looked like an immeasurable disaster fraught with infinite peril, may be converted into an opportunity for race redemption such as centuries of steady plodding could not provide. To-day the nations are at death grips, to-morrow they may stand on common ground. To that end three preliminary steps are necessary: first, this must be regarded as the war that is to end war; second, it must be followed by a really democratic peace; and third, from that peace a world-wide democracy must spring. Under such circumstances, and no man can say they are impractical, a League of Nations would be as likely to maintain peace as the so-called Balance of Power was certain to destroy it. Thus to transform the demoniacal ambition of the rulers of the Central Powers into the medium

through which their peoples are to be emancipated, would be to confer upon our enemies, as well as win for ourselves, a victory that nothing less than an all-embracing catastrophe could have made possible. War, secret diplomacy and commercial tariffs could have no place among nations that had everything to lose and nothing to gain by these ; nor could a competitive system which its profiteering proclivities have shown to be independent of conscience and morals live in an atmosphere of brotherhood and service. Indeed, a world under democracy should combine as naturally for mutual helpfulness as one dominated by selfishness, and the devices it evolves, divides for the aggrandisement of territory, wealth and power. To point to the greed that permeates Society as an unanswerable argument why such changes cannot be made is but to prove the degrading character of the old order and to ignore the fact that most of the best work in the world has been and is still being done from disinterested and altruistic motives. The so-called practical man who raises objections and foresees disaster in every departure from the old ruts may be reminded that the proposals do not involve a tithe of the loss of life and treasure sacrificed in this war. Yet while he regards this ruinous expenditure as practical, he begrudges the cost involved in bringing about the dawn of a new and better day !

It is the material sacrifice that many would be called upon to make that outweighs all other

objections, for like the rich young ruler, even otherwise good men "turn away sorrowfully" when idols have to be parted with. Yet those who, in these days, allow the things that all must ultimately leave behind to hinder the onward and upward march of men must surely feel unworthy of that inspiring host of twentieth century heroes who volunteered and gave, not only youth, prospects and possessions, but life itself, to win the opportunity that is being put into our hands.

After the war we shall either take a mighty leap forward or fall into anarchy and revolution. A nation without ideals is a nation without hope; it can neither fire imagination nor kindle enthusiasm; it has nothing either to look forward to or to live for. Let those so-called, but sadly mis-called, practical men, who condemn every upward movement and throw cold water on every project that reaches out to better things, ask themselves what is to happen when the terrible ordeals of reconstruction have to be faced, if cynics and pessimists are allowed to destroy the outlook and vision which alone can carry us through. The spirit that would mean disaster on the battlefield would ensure calamity at home. Is that what we want? Our heroes are imbued with an optimism that is unquenchable in the face of suffering and death such as words cannot attempt to portray, and we rejoice because of it, for we know that so long as that magnificent courage possesses them "All's well, and the lights are burning brightly." Are



COOKING DEMONSTRATION.

we to invite them to return to depression that would breed despair? Is that to be their reward? Let us either walk in their footsteps and pour sunshine and gladness into this sorely troubled land, or hold our peace, and we shall make better men and women and become more worthy of them.

To ignore the justice and urgency of a great all-round human uplift and redemptive effort, particularly in cities and towns, is to create resentment and beget opposition, at a time when every member of the community should be standing shoulder to shoulder, inspired by a common purpose and the will to achieve. Congested areas are self-destructive, not self-supporting, and it is notorious that for generations the large centres of population have drawn their vitality from country districts, where a natural and healthy life provides the backbone, stamina and grit that artificial existence all too rapidly undermines. Consequently, unless our great industrial armies can be housed under such wholesome and elevating conditions as will enable them to become at least independent of the rural areas, we are heading for the rocks, because in all probability our migratory sources of supply will be cut off. Agriculture is rapidly becoming, and is likely to remain, a much more important factor in national life, and there can be little doubt that higher wages, better dwellings and materially improved social conditions in the country will arrest the steady flow of young life to the cities, if these, added to the open-air experiences of the army

and navy, do not actually tend to turn it back. It must be no less apparent that emigration will have to be reckoned with, for the Colonies, like the Mother Country, are being denuded of their best, and as the sons of our glorious Empire have lived and fought side by side, and the spirit of adventure and daring has been kindled in our men, the interchange of experiences will have made the brave lads from our dominions into wonderfully fascinating and effective emigration agents, as they have painted in glowing colours the vast expanse, the virgin soil, the unlimited opportunity, the increased need, the rich rewards, and the exhilarating life of those magnificent countries that rightly appeal to the imagination and unconquerable soul of youth.

A nation that has passed through the experiences of this war ought not to be asked, and will never consent, to return to the pre-war limitations and injustices. In shaping the future it must not forget that Jesus Christ was not only the greatest Seer of visions and Dreamer of dreams who ever lived, but what for present purposes is much more important, He was the most practical Man and the greatest Democrat that history has revealed. It is upon the indestructible foundations He laid that reconstruction must build if the masses of the people are ever to become truly great and free.

The war has uprooted much that seemed firmly established and has expanded many confined systems, replacing them, often, with what would formerly have been regarded as impossible. Thus



HEALTH VISITORS.

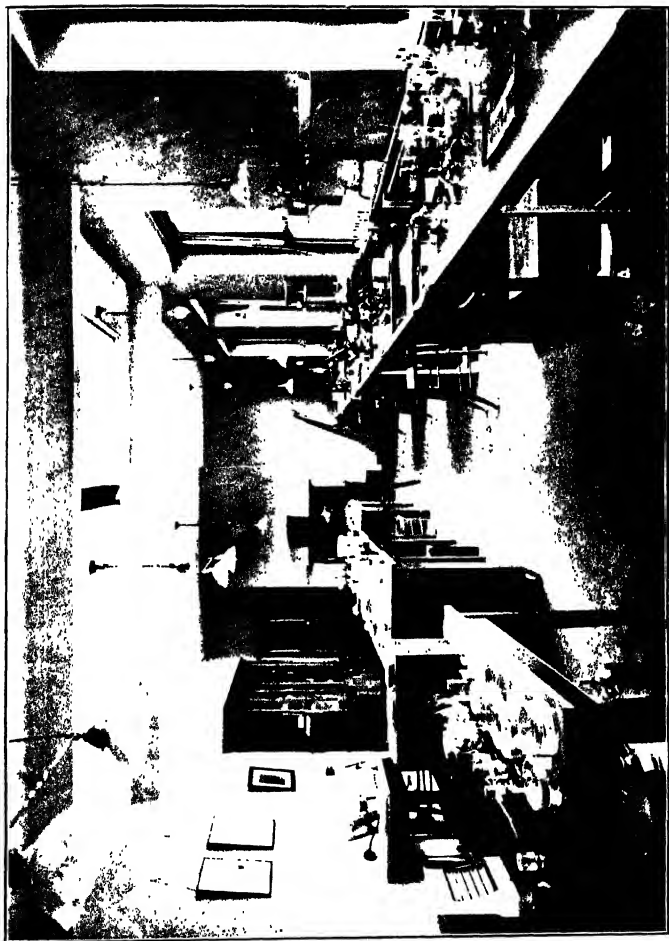
the ground has been somewhat cleared of its débris, and if there is wisdom and outlook enough to begin *de novo*, international co-operation will supersede war-making competition outside, and mutual helpfulness build where mutual antagonism destroyed inside. In this way the ashes of the war tragedy may yet be converted into soil out of which the redemption of the race shall spring. That, indeed, would make much of the sorrow and suffering worth while; for fearless warriors would count themselves privileged to die for the birth of a new and better world, and those to whom their loss is irreparable would feel prouder still, if that were possible, to have lived to see their gallant sons give themselves in order that generations yet unborn "might have life and have it more abundantly."

Reconstruction involves vast changes, but if the nation will live up to its highest ideals, the heroism of war may be followed by the heroism of peace. This is the spirit in which to face the great issues of the future. It is not by adding internal strife and bitter feeling to sorrow, but by working towards humanely-conceived reconstruction that men and women are to be lifted up and fired with the dauntless courage to achieve. How imperative this new conception of life will be when we come to face some of the future problems! Old men outnumbering the young men, hundreds of thousands of women who have learned to do men's work at men's wages, scores of thousands of physically unfit, every trade to reorganize

for civil service, a colossal mountain of debt, a world shortage of food that must last for years, a plethora of potential mothers and a corresponding paucity of prospective fathers at a time of decreasing birth-rate, and abroad, the rapid growth of our world-wide liabilities, all to be faced by a nation that has lost the flower of its manhood.

These and other enormous difficulties must be undertaken and carried through by a democracy which in the very nature of things will, notwithstanding a General Election, be largely out of touch with Parliament, and in a land where the value of everything has been artificially inflated, and normal laws and regulations have been set aside. In view of the fact that we have no previous experience to guide us in passing through such a revolutionary ordeal, it will be obvious that the period of actual transition will call for those indispensable forerunners of recuperation and recovery, statesmanship and sagacity at Westminster, and a spirit of universal sweet-reasonableness and personal and collective goodwill in the country.

If ever there was a time when the wisest men should be asked to survey the field, and in the light of all the facts and needs of the future prepare the plans and anticipate the means by which they are ultimately to be carried out, that time is surely now. For years to come State organization and control will be essential if chaos and revolution are to be kept at arm's length. But the magnitude and the gravity of the issues constitute a



MUNICIPAL BACTERIOLOGICAL LABORATORY.

call to high duty that is irresistible, and if we are made of the same grit and are moved by the same aspirations as the men who have heroically borne our calamity, the very prospect will make the blood course more quickly through our veins, and as we catch the magnetic spirit that led our loved ones to death or victory, we shall enter this arena of adverse circumstance and vital reconstruction with all the abandon with which they entered the trenches and give as they have given whatever is demanded of us to the extent of our all. That way lies a greater Britain, a nobler Empire, and a better world.

We are not called upon to cheer, but to follow !

APPENDIX I

THE FALL IN THE BIRTH-RATE

ENGLAND AND WALES, 1841-1915

(in five-yearly periods).

Period.	Rates per 1,000.		
	Birth Rate.	Legitimate.	Illegitimate.
1841-5 . . .	32·3	—	—
1846-50 . . .	32·8	30·6	2·2
1851-55 . . .	33·9	31·7	2·2
1856-60 . . .	34·4	32·2	2·2
1861-65 . . .	35·1	32·9	2·2
1866-70 . . .	35·3	33·2	2·1
1871-75 . . .	35·5	33·7	1·8
1876-80 . . .	35·3	33·6	1·7
1881-85 . . .	33·5	31·9	1·6
1886-90 . . .	31·4	29·9	1·5
1891-95 . . .	30·5	29·2	1·3
1896-1900 . . .	29·3	28·1	1·2
1901-05 . . .	28·2	27·1	1·1
1906-10 . . .	26·3	25·2	1·1
1911-15 . . .	23·6	22·6	1·0

The birth-rate was highest in England and Wales in the year 1876, when it was 36·3 per 1,000. Since then it has been continuously falling, the lowest record being that of the year 1915 when it was 22 per 1,000.



MUNICIPAL BACTERIOLOGICAL LABORATORY. INCUBATOR ROOM.

LEGITIMATE BIRTH RATES AND INFANT
MORTALITY IN SOCIAL CLASSES

ENGLAND AND WALES, 1911

	Birth rate per 1,000 Married Males under 55 years.	Infantile Mortality per 1,000 Births.
I. Upper and Middle Classes . . .	119	76·4
II. Intermediate Class	132	106·4
III. Skilled Workmen	153	112·7
IV. Intermediate Class	158	121·5
V. Unskilled Workmen	213	152·5
VI. Textile Workers	125	148·1
VII. Miners	230	160·1
VIII. Agricultural Labourers . .	161	96·9
Average } III to VIII } Working Classes . .	162	132·5

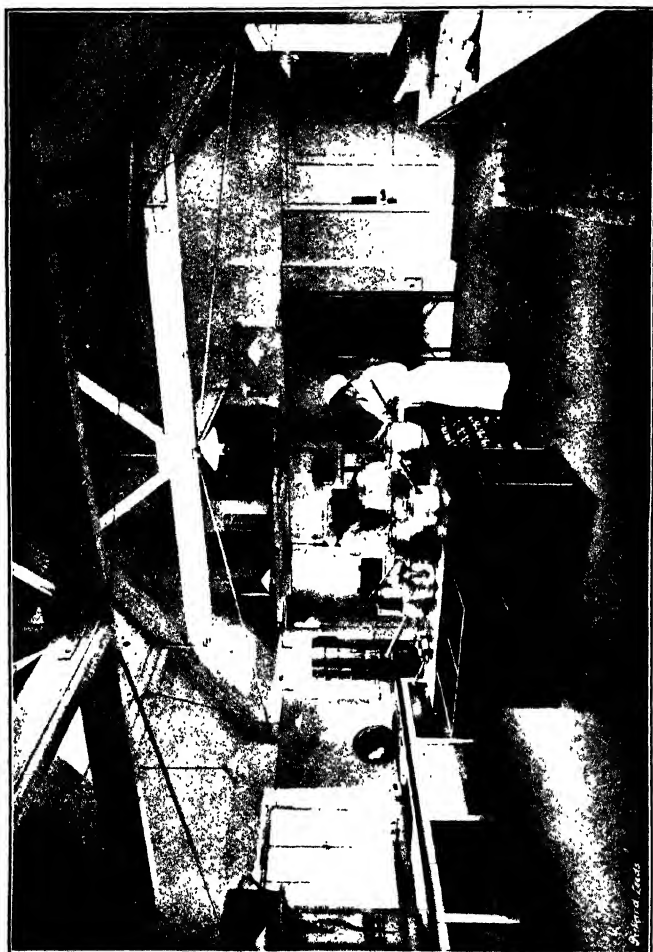
APPENDIX II

OTHER MUNICIPAL HEALTH ACTIVITIES IN BRADFORD

SANATORIA

BIERLEY HALL.—This institution is used for women patients suffering from pulmonary tuberculosis, and has accommodation for sixty-six patients, with a resident staff of twenty-four persons. The estate embraces about forty-five acres of land, a portion of which is to be used for surgical tuberculosis, probably the first in importance among the diseases of early childhood, for though it does not cause any serious mortality at that stage, it is responsible for a considerable amount of lameness and inefficiency. Indeed it is computed that one-third of the cripples in our midst owe their incapacity to this disease, though comparatively little in the nature of operative work is required, and experience has shown that if the cases are treated in the early stages cures which save limbs and joints are possible.

Our flagrant neglect of the most elementary precautions against bovine tuberculosis, the lack of grooming of cattle and the absence of cleanli-



COMMUNAL MEALS. SMALL ELECTRICAL PLANT.

ness in milk sheds and dairies are all the more discreditable when we remember that the health of children and invalids is largely dependent upon a pure and clean milk supply. The disease attacks the abdomen, glands, bones and joints, but it is reassuring to know that medical research has proved that it is as amenable to open-air treatment as the pulmonary form, and the same principles which govern successful sanatorium care in the one are with certain modifications, adopted in the other. A beginning was made at the Bierley Hall Sanatorium in 1915, and at the same time the Bradford Health Committee arranged to erect and equip a thoroughly up-to-date surgical pavilion where the most modern methods of treatment, such as X-ray, mountain sun, plaster work, technical splinting, etc., could be carried on; unfortunately this, like many other desirable schemes, now awaits the conclusion of the war.

ODSAL.—The Odsal Sanatorium, with eighty-four beds and a resident staff of twenty-three persons, is intended for a Smallpox Hospital, in case of an outbreak of that disease, and would then accommodate fifty patients.

GRASSINGTON.—The Grassington Sanatorium has 152 beds and a resident staff of forty-five persons. It is intended for tuberculous patients. Consequently when Odsal Sanatorium is not required for smallpox purposes—a rare occasion—there is sanatorium provision for 302 beds.

FEVER HOSPITALS.—In normal times the Leeds

Road Fever Hospital (now converted into a War Hospital) provides 210 beds for fever cases. Bradford is also a constituent member of three District Fever Hospitals, which were serving certain areas taken into the city when its boundaries were extended in 1899. The cost of maintenance is in proportion to population, which also determines the number of beds at the disposal of each part of the respective districts served. The aggregate fever hospital accommodation for the city is 277 beds.

In view of after-war developments, it is interesting to note that the Health Committee will have upward of 800 beds for hospital purposes of one sort or another in contradistinction to less than 400 beds maintained by the whole of the voluntary institutions throughout the city.

CONVALESCENT HOME.—A former Mayor presented the Semon Convalescents' Home—situated on the edge of the Moor at Ilkley—to Bradford in 1876 and endowed it with a sum of £3,000. It is intended for persons of slender means who are not actually in need of free quarters in a public institution, and accommodates upwards of eighty visitors.

Other activities of the Health Committee include the Tuberculosis Dispensary, with a staff of seven persons, the Municipal Pathological and Bacteriological Laboratory whose staff deals with some 900 samples a year, a Disinfecting Station, a Mortuary, and four Public Lavatories.

The Sanitary Department has exclusive of its



clerical staff thirty inspectors engaged in various public health services, of whom twelve are specially trained for the supervision of cattle dairies, food, etc.

Altogether, the staff employed in the services of the Health Committee numbers over 400 persons.

Exigencies of war and a growing sense of obligation to the race are awakening a new sense of municipal responsibility. The country, threatened with food shortage, has now to think out such problems as the increase of food supplies.

The city of Bradford has helped in such municipal enterprise by encouraging pig keeping,¹ the growing of vegetables,² the establishing of a municipal poultry farm and organizing communal food centres.

There is thus ensured for its sanatoria, hospitals and maternity institutions a supply of eggs, fowls, bacon, and vegetables and, at the same time, a profitable use is made of the inevitable waste these establishments must produce. The communal cooking saves food, fuel and labour and provides nourishment at a lower cost than would otherwise be possible.

THE POULTRY FARM

Seventy thousand eggs per annum are needed to meet the requirements of the medical institu-

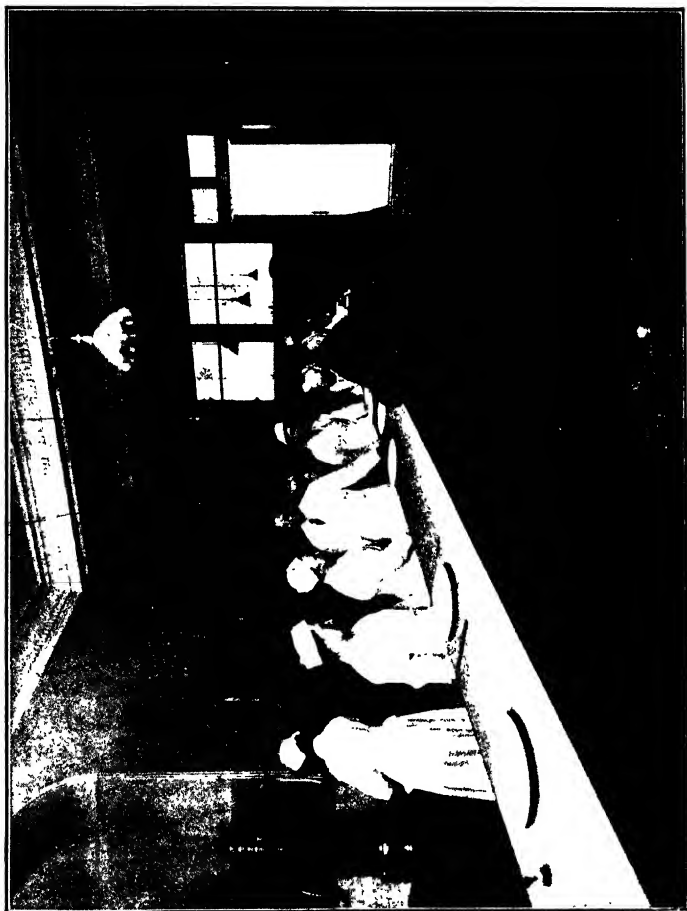
¹ At Odsal, about fifty pigs of the Large White Yorkshire breed are kept and include pedigree sows bought from Sir Gilbert Greenall at Warrington.

² Some thirty-three acres of grass land at Thornbury, Bierley Hall and Odsal have been brought under the plough and are now being used to produce crops suitable for the needs of the municipal institutions.

tions maintained by the city of Bradford. The difficulties attached to the regularity of supply, the uncertainty of freshness and quality, and the increasing cost, owing to the world shortage of eggs, led to the establishment of a poultry farm¹ in order to ensure continuity of supply of good quality.

Consequently this municipal poultry farm was established in the grounds attached to the Bierley Hall Sanatorium for consumptives, and covers some six acres. Admirably adapted for the purpose is the land which has been enclosed. It faces south, has a gentle slope from east to west, and is protected from the north and north-east winds by the wood behind, whilst the wood at the eastern end not only acts as a shield but makes an ideal rearing ground for chickens in the breeding season. The houses for the birds are built upon the latest and most approved principles. They face south, are 6 ft. square, 5 ft. 9 in. at the front eaves, sloping to 5 ft. 3 in. at the back, the floors are of wood, and the perches and platforms are all movable and work in tinned sockets. This is to prevent crevices, which might become breeding grounds for vermin. The scratching-sheds attached to the houses are 9 ft. by 6 ft., and the floor of each is composed of four inches of concrete covered with two inches of asphalt. This gives a strong, durable floor which is warm to the feet of the birds; it is hygienic, and

¹ My acknowledgments are due to Mr. C. House for permission to reproduce parts of his article in *The Poultry World*.



COMMUNAL MEALS. DISTRIBUTING CENTRE (2).

lessens the cost of building. The runs attached to the houses contain each 255 square yards. The ground, because of its natural slope, is never water-logged and cold—a great consideration. It means health and vigour and a full egg basket, instead of disease and unproductiveness. The runs are divided by 1 ft. 8 in. of boarding, topped by 4 ft. of stout wire netting. Four feet is the width of the pathways between the pens, whilst a 10 ft. roadway runs through the centre of the farm.

Care has been exercised in the choice of the stock. The breeds on the farm are white Leghorns, acknowledged the finest egg producers the world over, white Wyandottes, the best of winter layers, Rhode Island Reds, black Leghorns, and Anconas, and all have been obtained from the best strains in the country. There are fifty houses, twenty-four of which are occupied by white Leghorns, and fifteen by white Wyandottes. These are the stand-bys of the farm; the others are to be kept for business purposes, such as the sale of eggs for sitting, stock birds, and that most remunerative phase of poultry farming—the “day old chick” trade. There are nearly 800 birds on the farm. If we take 500 of the hens for egg production only, and leave the remainder for stock purposes and selling, that gives us 80,000 eggs, or 10,000 more than the Health Committee require at the moment. In making this calculation it is estimated that the hens will average 160 eggs per annum. The

Wyandottes and Leghorns are of Barron's famous strain, having been purchased direct. This strain has not only beaten all English, Scottish, and Welsh competitors in laying-competitions here at home, but it has achieved the greater distinction of having crossed the Atlantic in war time and of competing with and defeating America's best. The strain has a record of 220-230 eggs per annum. Thus an estimate of 160 eggs per annum is quite modest. There are nine incubators, ten foster-mothers, and a dozen cold-brooders. The incubator house, food store, egg store, and mixing house are situated in the outbuildings attached to Bierley Hall, and have been fitted up in such a manner as to ensure economy of time, labour, and space, yet at the same time to give the highest efficiency in working. The food is hoisted into the store by a crane, and as there is a galvanized iron shoot running from the store to each food bin in the mixing house below, there is no waste of material or time in its handling. Nine tanks in the egg room have a storing capacity of 23,000. The preservative used is waterglass.

The houses, runs, and appliances are estimated as being worth £1,200, and the live stock £750. This poultry farm should at an early date be accounted amongst Bradford's profit-making concerns, apart from the benefit it will confer upon the community in providing a continuous supply of eggs for the institutions for the good of which it has been started.

INDEX

Agriculture :

- Decreased Labour, 148
- Housing Question, 149
- Land Banks, 149
- Milk Production, 111 *et seq.*
- National factor, 203
- Railway facilities, need for, 149

Ante-natal Supervision :

- Bradford Scheme, 172
- Endowment of Motherhood, 101

Assets and Liabilities of the Nation, 143, 144

Back-to-back Houses in Bradford, 24

Bierley Hall Sanatorium, 190, 210, 213 *note*, 214

Birth-rate, Decline of, 9 *et seq.*, 75, 87, 157, 208

- Endowment of Motherhood, effects of, 93
- Factory Labour as a Cause, 73, 74
- Housing Conditions affecting, 23
- Legitimate Birth-rate in Social Classes, 209

Booth General, 163

Bradford :

- " Babies' Welcomes," 106, 171, 179
- Birth-rate, 11
- Factory Labour of Women and Children, 70 *et seq.*
- Fever Hospitals, 211
- Housing Conditions, 27
- Milk Distribution, 127
- Municipal Laboratory, 212
- Poultry, Municipal Farm, 213
- Sanatoria, 210, 211
- Sanitary Department, 212
- Semon Convalescent Home, 212
- Tramways, 51, 53
- Tuberculosis Dispensary, 212

- Bradford Maternity and Child Welfare Scheme :
 Ante-natal Clinic, 172
 Cookery Dépôt, 179
 Cost of Scheme, 172, 182
 Crèches, 187
 Dental Department, 195
 Eye Department, 187
 Health Visitors, 196
 Infants' Department, 174
 Infants' Hospital, 177
 Midwifery Service, 172
 Milk Dépôt, 177
 Post School Clinic, 194
 Pre-School Clinic, 185
 Bradford Model Village Housing Scheme, 44 *et seq.*
 Bungalow Houses, 45, 46
 Coal Fires, Elimination of, 50
 Communal Kitchens, 46, 47
 Hot Water Supply, 47
 Laundries, 47
 Recreation schemes, 55
 Returned Soldiers as first tenants, 62
 Social Service Committees, 55
 Voting Powers, alleged use to reduce rents, 59
 Buckley, Wilfred, 112
 Bungalow Houses, advantages of, 45, 46
 " Certified " Milk, 122
 Chicago Board of Health, 114
 Child Labour in Factories, 63, 66, 67, 74
 Churches, Work for, 160 *et seq.*
 Civic Enterprise, Records of, 150
 Clothing Clubs, 64
 Coal Fires, eliminating from Workmen's Dwellings, 50
 Communal Kitchens, 46
 Communal Laundries, 47
 Cookery Dépôt, Bradford Scheme, 179
 Cost of Endowment of Motherhood,
 Crèches, Bradford Scheme, 187
 Crèches in Factories, 71, 72
 Daylight Saving Act, 51
 Death rate :
 Average, 145
 Social Classes, comparative Death-rate, 24, 209

- Defective Children of School Age, 33
Degenerates, Census 1901, 33
Depreciation Standard in Housing, 37
Dental Department, Bradford Scheme, 195
Destructors, Houses built near, 48
Disease carried by Milk, 112
Distribution and Delivery of Milk, 125
Drinking facilities in Slums, 31
Dying Community, Great Britain as, 10
Economic Value of Persons, 153
Education :
 Endowment of Motherhood, effect upon, 96
 Feeding of School Children, 192
 Motherhood, training for, 77
 Overlapping of Education and Health Committees, 188
 Pre-school clinical treatment, 185
 School Leaving Age, raising, 63, 66
 Sex teaching, lack of, 76, 78
 Superficiality of, 76
Elliott, Ebenezer, 169
Emigration, 204
Endowment of Motherhood, 89 *et seq.*
 Amount of Grant, 93
 Ante-natal Supervision and After-care, 101
 Circulation of the Money, 98
 Condition of earning grant, 93
 Cost of, 94, 102
 Economic results, 95
 Education, effect upon, 96
 French attitude towards, 108, 109
 Local authorities, provision of medical help, 102
 Middle Classes extension of Scheme to, 95
 Nancy, experimental work at, 109
 Security of Unborn Babies, 99, 100
 Supervision of Home, 97
 Tax upon Bachelors and Childless Couples, 99
 Widowed Mothers, benefits to, 96
Eye Department, Bradford Scheme, 187
Factories :
 Crèches in, 71, 72
 Domestic Workshops, home influences in, 70
 Evils of Factory System, 66
 Half time Work, 63, 66, 67, 74
 Women's Labour in, 67, 70 *et seq.*

Fever Hospitals, Bradford, 190, 211
Fisher, Hayes, 130

Gas Works, Houses built near, 48
Grassington Sanatorium, 190
Grocers' Licences, 131

Harman, Dr. Bishop, 84
Health Visitor's, Bradford Scheme, 196
Hire-Purchase System, 64
Home Life the bulwark of the State, 92
Hot Water Supply in Workmen's Dwellings, 47
House, C. 214 *note*
Housing, 20 *et seq.*

Bradford post-war schemes, *see* Bradford Model Villages
Bradford, Working Class Dwellings in, 24
Congested areas, 129
Depreciation, standard of, 37
Industrial Sites, 29
Municipal Enterprise, 40
Private Enterprise, 38, 42
Provision kept below demand, 37
Public Health Expenditure, charge on bad property, 39
Sales of Property with falling Value, 37
Slums, *see* that Title
Standardized Dwellings, 28

Industrial Unrest Commission, 21

Infant Mortality :

Declining Birth-rate, 9 *et seq.*

Bradford, 25

Hand-fed Infants, 71

New York, 118

Venereal Disease as cause, 84

Infants' Department, Bradford Scheme, 174

Infants' Hospital, 177

Inspectors, Duplication of Staffs, 191

Kitchens, Communal, 46

Laundries, Communal, 47

League of Nations, 250

Lever Bros.', Factory Crèche, 72

Local Authorities' Housing Enterprise, 40

Local Government Board, 30 *note*, 41, 101, 130, 153, 172, 182
 Longlands Improvement Scheme, 48

Malthusianism, 12, 13

Manningham Mills, 254

Masham, Lord, 154

Maternity and Child Welfare Work :

Bradford Scheme, 171 *et seq.*

Departmental overlapping, 187

Parental Responsibility strengthened by, 108

Training for, 197

Voluntary Work, 103, 104, 105, 179

Middlesbrough, Birth-rate in, 73, 74

Midwives, Municipal, 102, 172

Milk, Production and Sale of, 101, 111 *et seq.*

Milk and Dairies Act, 122

Milk Dépôt and Laboratory, Bradford Scheme, 177

Ministry of Health, proposed, 128 *et seq.*

Model Villages, *see* Bradford

Motherhood :

Endowment of, *see* that Title

Training for, 77

Nancy, Endowment of Motherhood Scheme, 109

National Balance Sheet

National Clean Milk Society, 113

National Health Insurance Commission, 129, 131, 132

Nelson, Admiral Lord, 106

Newman, Sir George, 33

Newsholme, Sir Arthur, 153

New York :

Board of Health, 117

Infant Mortality, 118

Notification of Births Act, 197

Odsal Sanatorium, 211, 213 *note*

Open-Air School, 190

Overcrowding, effects of, 38

Overlapping, Departmental, 128, 187

Parental Capacity and Pride, strengthening, 93, 107

Park, Dr. 117

Pasteurization of Milk, 118

Population, Movement from Country to Town, 148

Post School Clinic, Bradford Scheme, 194

Poultry, Bradford Municipal Farm, 213

Pre-School Clinic, Bradford Scheme, 185

Public Health :

Expenditure as a Charge on Bad Property, 40

Ministry of Health, 128 *et seq.*

Prisons, Asylums, etc. Cost of, 66

Reconstruction, Tasks of, 200 *et seq.*

Recreation on Model Villages, 55 *et seq.*

Re-housing on Same Sites, 30

Rhondda, Lord, 127

Rhondda Coalfield, Birthrate in, 73

Richel, Professor Charles, 108

St. Helens, Birth-rate, 73, 74

Salt, Sir Titus, 154

Samuel, Herbert, 179

Score Cards for Dairymen, 119, 120, 121

Semon Convalescent Home, 212

Settlements in Slums, 165

Sex Teaching, 78

Slums :

Churches, Work for, 160 *et seq.*

Cost of maintaining, 34

Drinking facilities, 31, 166

Commercial Failures, 31, 32

Perils of, 30

Raising Standard of dwellings, 36

Rents, 166

Settlements, 165

Smallpox Hospital, 211

Social Service :

Slums, 165

Village Committees for, 55 *et seq.*

Standardization in Housing, 28

Sydenham of Combe, Lord, 83

Tramways, Bradford, suggestions for improved service, 51, 53

Tuberculosis :

Bradford Dispensary, 212

Grassington Sanatorium, 211

Housing Conditions as cause of, 34

Milk, contaminated, as cause of, 112, 118

Open-air School, 190

Poverty Disease, 152, 153

United States :

- Clean Milk Supply, 113, 114, 116, 117, 119, 122
- New York Infant Mortality, 118

Venereal Disease :

- Causes, 81, 82
- Clinics, 86, 87
- Compulsory Notification, 85
- Royal Commission, 79
- Statistics, 84
- Treatment for, 80

Voluntary Work, 103, 104, 105, 179

Wealth of United Kingdom, Valuation of, 145

Y.M.C.A., Services rendered by, 162, 163

SOME PRESS OPINIONS OF A YORKSHIREMAN ABROAD

By E. J. SMITH

"The author . . . has written a most interesting account of his travels to Australia, New Zealand and South Africa, which in simplicity of style and accuracy of observation many professional literary men would find it difficult to surpass. Mr. Smith has the instinct for knowing the kind of things that go to make a literary impression . . . The sympathetic style of the writer lures us on to read him from beginning to end."—*The Daily News*.

"He writes like a man of affairs by no means devoid of a sense of humour, and his chronicle derives a good deal of charm from its good sense and friendly spirit."—*The Times*.

"The number of globe-trotters and of their impressions has been so infinite that one naturally approaches a book of this sort with a feeling of weary resignation, if not of actual prejudice and suspicion. All such feelings rapidly disappear as we turn the pages and quickly begin to realize that the traveller is a man of decided character, with a mind uncommonly well equipped for seeing and making others see through his eyes all that is beautiful or bizarre in the scenes visited."—*Evening Standard*.

"Refreshing in its straightforward narrative, lit up by occasional humorous touches."—*T. P.'s Weekly*.

"Keenly observant and endowed with a lively sense of humour Mr. Smith has given us an entertaining book of travel, blending useful information with descriptive passages all the more pleasing because there is no attempt at 'fine writing.'"—*Aberdeen Journal*.

"Many of the author's descriptions of scenery are singularly beautiful, and as a book of travel it approaches near to a model of all such books."—*Catholic Times*.

